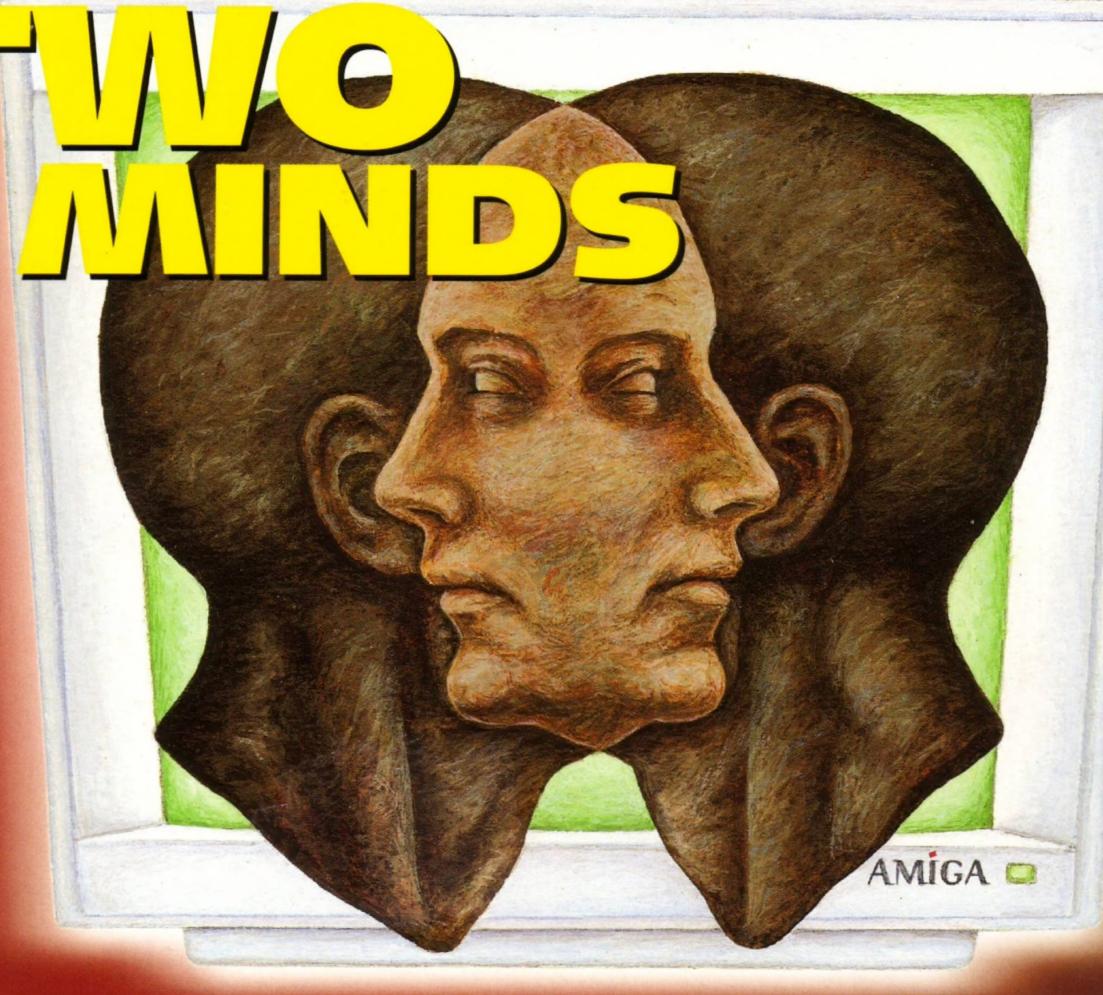
PARAGERIE DE COTOBER 1996 I ISSUE 89
Hfl 19.95 I US \$9.95

Your Amiga has the power to mimic many other computers. Find out how to run Quark Xpress, Photoshop, Windows, or whatever you want on the Amiga

Multimedia Extravaganza

A great new series starts this issue – we'll be taking you step by step through the process of mastering your own multimedia title. Part One will show you the many different ways of obtaining digital images for your project



SOUND ADVICE

OctaMED Soundstudio – the latest incarnation of the Amiga's favourite soundtracker reviewed

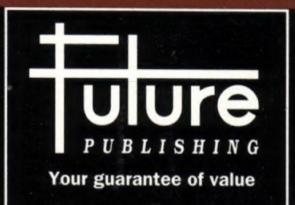
KICKING OFF AGAIN

Does Anco's sequel to former footie champ Kick Off stand a remote chance of a return to glory?

IMAGE CONSCIOUS

ImageFX is now, by default, the best image processor – but it still continues to get better

Reviewed this issue: Lara '96, Tin Toy, ImageFX 2.6, X-DVE 2.5, CD-ROMs. PLUS: tutorials on Octa/MED, Real 3D2, Blitz Basic. Internet



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Techinal Software

0 ^+ V0298 NORTHC V1.3 (AB)

TA + VOS23 DICE C COMPILER (AR)

C *+ V1041 DIGITAL BREAD ROARI

CI ^+ V1209 GNU C++ COMPILER (3) THD

TA VISRA HOW TO CODE IN C (AR)

Popular Utilities

A+ V1362 CHECKERS TOOLBOX

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^^ V2070 MWB ICONS, PATTERNS

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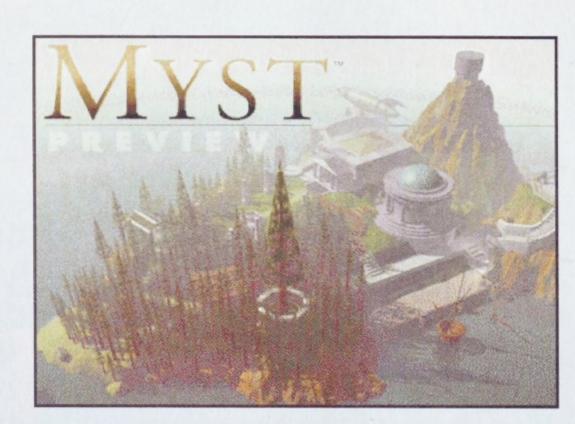


1 1 No Myst for the Amiga
In an unprecedented move, games company Brøderbund has decided not to bring out Myst for the Amiga. We give you the lowdown.



The next generation in graphics cards will be hitting the UK soon with phase 5's impressive looking CyberVision64/3D and Village Tronic's Picasso IV.

4 Demon Web Alert
The UK's best-known Internet Service Provider plans to give 5Mb of web space to all its dial-up customers - absolutely free.



AMIGA

DSERIOUS

phase 5

DIGITAL PRODUCTS



58 ImageFX 2.6

The Amiga's top image manipulation software gets an update. AF's own image consultant, Ben Vost, assesses the new features.

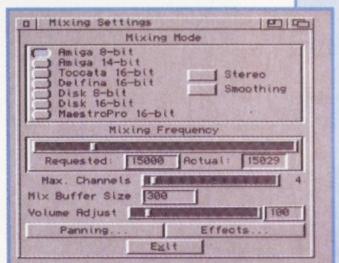
Instant

Choosing a hard drive is one of the most important decisions you can make, as

Graeme Sandiford discovers with Eyetech's new drive.

OctaMED Soundstudio The Amiga's

favourite soundtracker surpasses any musicians wildest dreams with new 64channel capability and bags of other features - it's music to John Kennedy's ears.





An almost forgotten digital effects package rises from obscurity to challenge the might of ClariSSA.

David Taylor is in dire need of FX.

45 CREATIVE

90 Internet Tutorial

You've got the essentials, but this is where the fun starts as Darren Irvine introduces IRC, GRn and AmiSlate.

2 OctaMED Tutorial

For a really effective Med module, you need to learn how to control your effects. Darren Irvine is your host.

Real 3D2

Graeme Sandiford goes on about meshes and b-splines, then pulls a bunch of flowers from nowhere!

Blitz Tutorial

The irrepressible John Kennedy is still pursuing the goal of the ultimate Amiga web-browser. This month, it means he has to explain compound variables, structures and lists.

45 REGULARS

53 PD Select Resident PD guru Robert Polding is your guide for another month's offerings.

(P) E) select

Workbench

Your chance to get those tricky problems sorted out - Graeme Sandiford is the man with all the answers.

80 Amiga.net
The evil hand of commerce forces Darren Irvine to check out Amiga companies on the net.

83 Subscriptions
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Mailbag

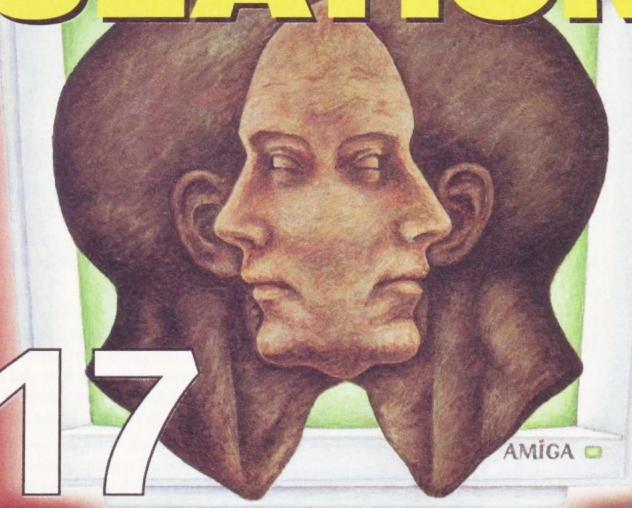
Nick Veitch fields questions and queries on everything from Brazil to HD installable games.

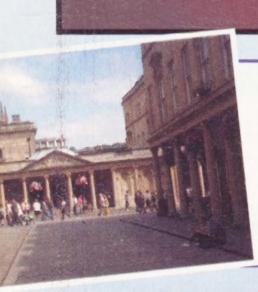
AF COVER FEATURE

Your can run software from pretty much any computer platform on your Amiga - providing you have the right equipment. Simon Goodwin begins

his feature with an introduction to the art of emulation.

page





MULTIMEDIA

25 It's Bath Time – Part One Ben Vost embarks on the first part of his epic feature focused around creating a multimedia presentation. The opening chapter looks at ways of getting hold of the necessary images and graphics.

J SCREENPLAY



Tin Toy: Interesting character!

Previews Andy Smith looks at a selection of forthcoming Amiga titles.

The Reality Games
Pack 1 & 2

There are a whole host of games in these two packs and the kit could mean that we all have a bash at creating our own little epics.



Collect the stars, kill the enemy and leap over the gaps. This new adventure game from Mutation is loads of fun.

Kick Off '96

All that remains is the name in this complete reworking of what was once the best footie game in the world. Have Anco done enough to seize the championship from SWOS?

ALara '96 Just in time to miss out on England's sad performance against various second-rate cricketing nations, now you can lose too!



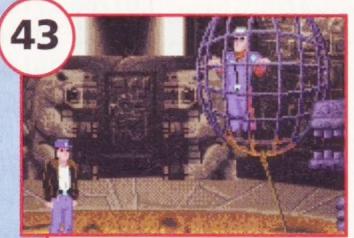
Win a fabulously fast A1260 accelerator and a host of other prizes in this terrific compo.

Gamebusters To we've got the full and complete solution to Flight of the Amazon Queen.

Alien Breed 3D II Tutorial Andy Clitheroe, the creator of AB3D II, shows you how to design your own levels.



Lara '96: Watch the spin on that.



Gamebusters: Hints and tips.



Coverdisks

Font Machine



Disk A Map textures or pictures onto your fonts Plus: VMM 3.5, EdwordPro 5.6 and Ultra **Accounts 3**

p106

R3: The Art of Rocketry



Disk B **Direct your ship** through space to

complete your mission mastering the laws of gravity **Plus: The Worms** and Foundation **Editor**

p104

CD-ROM

Another month spent slaving away to try and bring you the best collection of programs, pictures and utilities that we can find. Join us on a multimedia tour of Bath in conjunction with an extensive feature. Play the games, create your

own fonts and discover whether or not your contribution made it onto this month's CD

p112



What the *hell* is this?

Is it...

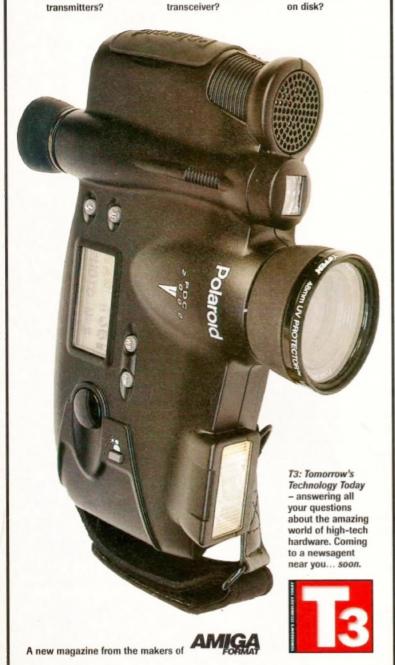


A personal night vision viewer with infra-red and UV transmitters?

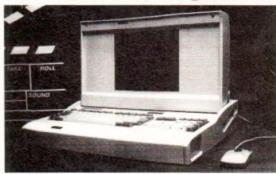




A digital camera which stores pictures on disk?



PAWS 1200 (Portable Amiga Workstation)



The PAWS (Portable Amiga Workstation) kit contains Case, 10.4° Active Matrix LCD, LCD Panel Driver (NTSC and PAL), Laptop Power Supply, Ability to utilize laptop batteries that can be recharged internally (Duracell DR31 NiMH), Microtrackball, Link-It, and APS Power Management Software.

Specifications:

- Dimensions: 18"W x 12?"D x 4i"H, 11 pounds in weight (Fully Loaded System)
- · Power: Auto-switching 110/220V external Power Supply. Internal monitoring circuit for batteries warns users of low power situation and charges batteries when system is off.
- Batteries: Duracell DR31 Laptop Batteries or Compaq Extended Life Battery
- Battery Life: Average continuous battery life 1.42 10010. CYCHIE LCD: 640 x 480 Active Matrix Colour Panel (10.4" Diagonal Measure) Battery Life: Average continuous battery life 1.25 hours. Average normal battery life 2 hours.



The Gecko is an external solution to allow Amiga users to utilize standard VGA/SVGA monitors The Gecko comes with the main unit, power ecko supply, and cable. The Gecko connects directly to the Amiga RGB port and supports many modes.



- Approximate Dimensions: 4"W x 6"D x 2i"H
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 Modes: NTSC, PAL, DBL NTSC and PAL, Productivity Modes, and Video Toaster Support.



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PRINTED IN THE UK BY ST IVES PLC
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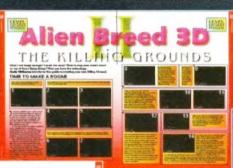
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X-DVE 2.5 P6

Dave Taylor ranted on about this so much I had to check it out, and I was

ALIEN BREED TUTORIAL P50 The AB3D II editor software will be pretty tricky to use, unless you have our exclusive tutorial, written by the programmer!



Allien Only you know what terrors lurk around the next corner... next corner... MIM W. 600 30

ALIEN BREED COMPETITION P40 The best competitions are always in the best Amiga mag. Design a level and win a 1260!



LARA '96 P39
A little late to help
England beat Pakistan, but
you can still enjoy the
thrills of test cricket. You
can even watch the Amiga
play itself if you are sad.

Image

1111

the same of the sa Instant Prive

GamaBusters

GAMEBUSTERS P43 If you still can't get

airborne with Flight of the Amazon en, check this out

INSTANT DRIVE P63 Adding a hard drive is a serious business, so our serious pages put this one to the test.

1 12 12

IMAGEFX 2.6 P58
That evil Mr Vost cunningly snapped a shot of the rest of the team, then did evil things to it with the latest version of the amazing ImageFX.

onth In View

Beer and idle comments set Nick Veitch off on yet another rant about all things Amiga...

you would think that working on Amiga Format would be enough entertainment, but occasionally, I have been known to visit local hostelries, to sample their wares and discuss weighty Amiga topics with all and sundry.

I happened to be there last night, and someone, who I wouldn't want to embarrass in print, suggested I must be finding it a bit hard to think of optimistic

things to say about the Amiga these days.

Well, I don't find it hard at all actually. Just take a look at some of the excellent things we have in this issue - things like OctaMED Soundstudio. This has matured from

being a slightly better than average soundtracker into a quite tremendous musical tool. In fact, it is more suited to creating many types of music than more conventional, notation based software.

Then there's the latest version of ImageFX, and the equally exciting X-DVE 2.5. Added to our demo of Art Effect on the

CD, there's still lots happening on the graphics front. Next month we'll be taking a look at all the stuff

> pouring out of Germany, and we may see some great new games from Poland.

Things could certainly be better, but the fight is far from over. Why don't

you turn the page and look yourself...

Nick Veitch, Editor

vorowse

a w-w-w well wicked web browser

The fully featured World Wide Web browser, IBrowse makes surfing the net with your Amiga a breeze. Keep abreast of upto-the-minute sports results, download the latest demos. browse the endless list of diverse and exciting web pages ...

Cruising the whole wired world with IBrowse is no more effort than clicking your mouse button.

browse features

- Supports HTML1, 2 and 3 as well as Netscape™ extensions.
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latest Workbench 3 features.

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IBrowse needs

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- Requires a 68020 processor or faster



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Installing Net&Web couldn't be simpler, just enter your login name, password and Internet Service Provider then sit back and let Net&Web do the rest

EASY TO USE

Surfing with Net&Web is so easy with the super-slick IBrowse (available separately) the powerful MetaTool email program and the DaFTP program for file transfer.

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The Internet... Easy as 123

EASY TO CONNECT

Net&Web is compatible with a wide range of Internet Service Providers (ISPs), including Demon Internet, InternetFCI, CIX and many others. Just choose your ISP from our list and Net&Web will set up your Amiga to connect at their local point-ofpresence.

Net&Web Software Net&Web Pro (TermiteTCP, IBrowse & Email



Introducing TermiteTCP

Your Gateway To The World

Finally, a TCP/IP Internet connection for your Amiga that doesn't take a Rocket Scientist to configure and use!

TermiteTCP Software £59.95

- and obtain an internet account. Enter your ISP into Termite TCP's GUI, or
 - choose "Record Logon Script" to have TermiteTCP do it all for you!

Call an Internet Service Provider (ISP)

Click on "Connect" - It really is that EASY!

Modern INIT Command	ATS11	100L150-0
ISP Phone Number	Bw015	10649666
Connection Timeout (sec)	90	
Serial Device Name	squarei	serial device
Unit	0	
Basi	C	115,200
Handshaling	CI	RISICIS
Line	1	Carcel

Figure 1	Options
	Pelogresoft coult
Default Domners	heoft couk
filetwork Mask	255 253 255 0
Albertade DNS IF Address	182.88.174.95
Name Server (DNS) IF Address	158.152.1.183
Remote IP Address	0.00.0
Local IP Address	0.0.0.0

- Easy-to-use GUI configuration and operation.
- Comprehensive printed manual that takes the mystery out of the internet.
- Written from the ground up at Oregon Research for optimum performance.
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- PPP support built directly in.
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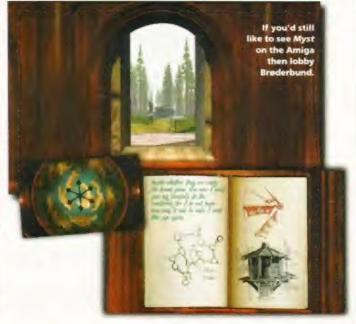
Everything was looking very promising when e first got the preview up and running.



A		C	1
FO	3MA	ne	3WS

	Myst never quite makes it
•	Phase 5 on the ViRGE of 3D revolution pla
•	Opus 5.5 now shipping pl
	OctaMED Soundstudio offer pl

Myst not out on Amiga Shocker!



Now you have it... Now you don't. Myst on the Amiga that never really was. Ben Vost investigates...

ucky enough to have an Internet connection? Then you may have noticed that a preview of a new game called Myst was put up on Aminet on the 4th of August. If you also keep track of what's going on in the PC and Mac world then you will have recognised the title of this game - it was one of the most popular graphic puzzle adventure games ever sold on those platforms. So, strange, when practically every games publisher and their best friend are leaving the Amiga for dead, Brøderbund are releasing one of their most popular games on our machine. How odd. The demo took a fair while to download since it was over 20Mb when unarchived, but the accompanying docs did nothing to dispel the notion that this indeed was a kosher Brøderbund title.

Being the investigative types we are, we emailed the address shown in the documentation and asked a few questions of the uploader. It turned out that the uploader wasn't present but some of the coders responsible for the demo were, however, they didn't speak

English. Still, they replied to our questions and we managed to ascertain that the demo on Aminet was merely a taster to see if enough interest was generated enough to produce the whole game. The game would require a Hi-Res display (minimum 640x480) and a lot of hard disk space. And, if you didn't have an AGA machine you could still play Myst, provided you had either a Picasso II card or another RTG graphics card running CyberGraphX, which would probably make it the first commercial game to properly support graphics cards.

The email was signed by Ludi of Studio Vision Software team, plausible enough, But still our curiosity drove us on. We found Brøderbund's UK office from their web site (www.broderbund.com) and gave them a ring. The official line at the time was that they'd heard rumours of an Amiga version, but nothing concrete, we were told that Brøderbund would be in contact. We carried on downloading the demo and eventually unarchived it took a look. Hey it's great, the Amiga's games scene could really pick up if and

when Brøderbund decide to release it. We talked to Brøderbund again, but they had some bad news. "The demo has nothing to do with us." Still, we protested, you could use it to gauge response and then bring out an official product. We can put a disclaimer on the CD with the demo, and, after all, it's not like you are losing any revenue over it, you aren't selling the game to Amiga owners anyway. But the legal eagles stepped in saying they didn't want to see the demo appear anywhere and were considering legal actions against the programmers.

While Brøderbund had a valid point in wanting to protect their intellectual property it seems they might have missed a golden opportunity. If you want to see Myst come out on the Amiga, why not write to Brøderbund UK about it? Their address is:

First floor, Allen House, Station Road, Egham, Surrey TW20 9NT.

"...fitting a hard drive is one of the best moves you could ever make..."

INSTANT DRIVE PAGE 63



OCTOBER 1996

X-DVE GETS VM

It just goes to show you just how influential our reviewers are (and how willing to listen to suggestions ClassX are).

Following Dave Taylor's review of the superb X-DVE 2.5 on page 68 (AF Gold 94%) in which he suggested that the package should support virtual memory to make it easier for those on a budget to create large sequences. ClassX have compiled a new version of the software that now supports virtual memory. Well how about

BLITTERSOFT TAKE ON THE GERMANS

Milton Keynes-based Bilttersoft have just been appointed as a distributor for Phase 5 products in the UK. joining White Knight Technology and Gordon Harwoods.

Blittersoft (on 01908 261466) have also got news of the PicassoIV graphics card to share with us this month which is based around the 64-bit Cirrus Logic chipset and has a built-in flicker fixer for A4000 owners.

The board will take up to 4Mb of EDO RAM for top speed and will work on both Zorro II and Zorro III machines. Just like the new CyberVision, the PicassoIV will have an expansion bus for an optional MPEG decoder, TV tuner, sound chip and/or 3D chip. The card also acts as a switch box for different audio sources so that you can choose between your Amiga sound, CD-ROM audio, a video source or even sound from the proposed sound chip add-on. Finally, the board is also going to be genlock compatible

The UK retail price for the PicassoIV has been set at £399.95 and it will be available in September. Contact Blittersoft on: 01908 261466.

Phase 5 enter third dimension

Phase 5, developers of accelerators. the CyberVision64 and CyberGraphX standard, have announced the latest addition to their innovative product line. The CyberVision64/3D is a new RTG graphics card based around S3's Video and Rendering Graphics Engine (ViRGE) graphics chipset.

Although S3 are being tight-lipped about the actual performance of their new chip, their web site (www.s3.com) lists ViRGE's capabilities in some detail offering information about the fact that ViRGE is able to perform real-time 3D functions such as bi- and tri-linear texture filtering, perspective correction, depth cueing and fogging, without giving you the all important polygons-a-second figure, which might mean that ViRGE can do all this at the same speed as an A500 with half a meg Chip RAM - although given S3's track record we doubt it.

ViRGE is also compliant with all the current 3D standards like OpenGL and QuickDrawGX which would mean the possibility of an OpenGL version of Lightwave for CyberVision owners. Phase 5 plan to develop their own 3D

library tailored to ViRGE's capabilities so that even if Newtek can't be bothered, we're sure that perhaps Maxon or Impulse can.

Phase 5 are also promising addons for the graphics card like an MPEG decoder that will play back full-screen or in a window on Workbench and a scan doubler. That would solve A4000 owners blues when it comes to choosing a monitor, since it will enable any VGA/SVGA-type monitor to be plugged into your machine. Perhaps the best thing will be that owners of Zorro II-based machines will no longer be left in the cold as the new CyberVision auto detects Zorroll/III and works with either.

One last impressive thing about the new card is the fact that even though it is using new technology and offers new features, it will be available at a significantly cheaper price (but note UK prices have yet to be firmly set).

For a start, owners of existing CyberVision64 boards, especially those that want MPEG capabilities, will be able to upgrade to the new board,





complete with MPEG decoder for just 499DM (about £270), anyone wanting to buy the board will pay 449DM (about £240) for a 2Mb version and 599DM (around £325) for the 4Mb

The MPEG module should be available at the same time as the graphics card itself and will retail for 349DM (roughly £190), with the Scan doubler to follow at 149DM (about £80).

As usual, you will be able to buy all of the new CyberVision products from White Knight Technology on 01920 822321 when they come out later this year.

Survival of Software direct the fittest

Spread the word - The **Amiga is NOT**



The Survivor. **AMIGA**

When a guy as well-known in the Amiga community as Eric Schwartz gets involved, you know that things will start to happen. Eric has put together an archive containing several versions of a picture he has produced so that they can be disseminated in as many ways as possible.

In his readme accompanying the pictures he suggest printing it on posters, t-shirts, even putting it on the web. Schwartz aims to increase awareness of the Amiga as a brand, showing that the machine is a survivor in spite of the changes in ownership over the past three years.

The archive is on this month's CD in the Serious/shareware/misc drawer. Take a look and then spread the image as far and wide as it will go. You know it makes sense.

from Direct Software

News reaches us of a new shop dedicated to Amiga products based in Northampton. Called Direct Software they claim that they are totally committed to getting the Amiga back on its feet by stocking the widest range of Amiga titles in the country. They already have stocks of hundreds of Amiga titles including 80 for the CD32 and promise to try to obtain absolutely any title, no matter how old.

In addition to this commendable service Direct Software also stock titles that are usually only available through mail order such as BPM's Reality series. As if this wasn't enough, Direct are also putting together their own graphic adventure with rendered intros and full motion video clips.

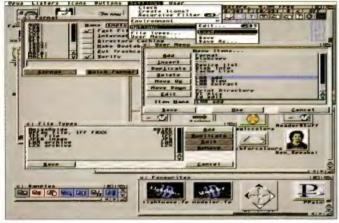
Last but not least, Direct are planning an Amiga-only store, but they are relying on a good response from Amiga owners in order to be able to do this. As an incentive for this Direct retail all their software retails at prices below that recommended by the manufacturer.

For more details contact Direct Software on 01604 722499.



Directory Opus 5.5

now available!



Directory Opus is invaluable in the AF office.

PSoftware demonstrates its continuing support for the Amiga with the release of the new version of the Amiga world's most popular directory and file management utility. After more than 12 months of extra development, *Directory Opus* 5.5 is more of a new version than just a simple update and it contains many changes and enhancements over the original product.

After receiving many comments and useful suggestions from *Opus* users, almost every facet of the new program has been examined and subjected to user scrutiny, backed up by extensive field testing from very persistent Beta testers. This release extends the original *Opus 5* concepts and provides many significant improvements in both operational power and usability. Take a look at the following enhancements

- A new Icon Action Mode gives all the power of name mode Listers but with icons.
- Button banks and Listers need no longer be activated first in order to see right and middle mouse button clicks.
- WorkBench Replacement Mode has been enhanced. Use Opus 5.5 with complete confidence to replace the standard Workbench.
- An integrated OpusFTP capability lets you access remote Internet sites directly from standard Opus Listers.
- Button banks can now be borderless with a sleek minimal dragbar instead of a full window border.
- New Filetype-specific pop-up menus allow special menus for icons and files. Use Filetypes to add custom menus for different types of files and icons.
- Custom buttons have a pop-up menu giving access to an extended selection of commands.

- New independent HotKeys are now supported.
- New Scripts system allows functions to be executed upon most system
- Custom menus have been improved with multiple user menus with sub items.
- New Automatic Filetype Creator allows you to create and test Filetypes with ease
- A font viewer is now included. Just double-click on a font to view it.
- Listers now have field titles, singleclick re-sorting by fields, plus a new version field which reads the internal version information from each file.
- New colour remapping of button and icon images with support for 'Magic Workbench' and similar systems.
- Cybergraphics RTG now supported.
- You can now selectively hide unwanted drive icons from the Opus main window.
- Enhanced clipboard support provides full cut, copy and paste in gadgets and file Listers.
- Listers are no longer blocked while busy – you can now resize, iconify, and scroll busy Listers.
- Icon and Lister snapshots are now stored separately from Workbench.
- Listers can now display a background picture or pattern.
- A new internal Opus CLI allows you quickly test commands and ARexx scripts.
- Several new internal commands and many new ARexx commands have been added or extended with new features.
 You can now even add you own internal commands with ARexx.

For more details see the web page at http://www.livewire.com.au/gpsoft/ Opus 5.5 RRP is £59.99. Contact Wizard Developments on 01322 527800.

The Bradford Column 🛭



With all those angry young men from Amiga Power now off being not quite so angry on other not quite so wonderful magazines, with the vast majority of software houses who grew fat and successful publishing Amiga titles now worshipping at the Altar of the interactive movie.

with so many of the retailers who moved box after box of A500s now building their own PCs, and with all the ex-Commodore personnel who became household names now off 'pursuing other interests', who is there left to bring some crumbs of comfort into the increasingly bleak world of Amiga owners?

More people than you might think. The add-on and peripheral market is clearly still buoyant. The new, software houses who now publish Amiga software are doing quite respectable figures and there are still pockets of enlightened retailers throughout the UK who would be only too pleased to help you get your printer working with your A1200, and flog you some software too, of course. There is even a new store opening in Northampton that will be completely dedicated to the Amiga. Yes, entirely.

The add-on and peripheral market is clearly still buoyant

And when you think about it, it's not such a crazy idea.

There are far more Amiga machines installed in homes than all the PlayStation, Saturn, 3DO and N64s put together, and look at the number of other stores competing desperately with each other to service their owners' needs.

As for the PC, well, retailers are finding it increasingly difficult to sell software, mainly because every corner store, supermarket and garage now has a selection of CD-ROMs to tempt the casual purchaser. And with the blockbuster releases, the Grand Prix 2s of the world, the chain stores inevitably slash the price so low that the smaller retailers would lose money if they tried to match it. This results in the store either not stocking the title, and losing customers or stocking the title at a higher price and losing customers because he is too expensive.

Yet while all this is going on, there are still Amiga owners going into the stores, asking for new releases and being told that (Duh) 'there's no demand for Amiga software anymore.' If more retailers removed the blinkers then surely they would see that by choosing to stock Amiga software they would (i) obviously attract new customers, particularly if they spend a few bob in their local paper telling the world they can get Amiga-related goodles in the store and (ii) make a higher margin on the products they sell because they wouldn't have to discount the price to match their local 'superstore'. My God, this is so simple it might just work!

The opinions expressed in this column are those of a fine, upstanding individual who can take his beer like a man, even if he does cry like a baby when he falls over on the way home, not those of Amiga Format (who don't).





"Audiogenic have made a real effort with this one and it's worth applauding them..."

LARA '96

PAGE 39



VISCORP OWNS THE AMIGA

n July 24th, Viscorp put out a general letter to the Amiga community explaining the situation with Escom's bankruptcy and their purchase bid for Amiga Technologies. In it, Bill Buck states that because of the bankruptcy, Viscorp have agreed with the courts to continue to operate Amiga Technologies as a going concern until all the paperwork has been signed and they can start up Viscorp

Petro Tyschtschenko will continue to act as general manager for Amiga Technologies and he will be joined in the post by Raquel Velasco. Al Duncan, another ex-Commodore staffer will be joining Viscorp to look after sales and distribution of the Amiga and other Viscorp products in North America.

Finally, Mr. Buck states that all the current engineering efforts will be combined and 'professionally managed', and he apologises for Viscorp's lack of communication over the past few months and puts it down to the busy schedule for the takeover of Amiga Technologies.

On another front, following the recent Amiga convention in Montreal, revealing details came to light over Viscorp's short term plans for the Amiga. These include



bringing out an 060 accelerator card and starting an architecture design group.

It also came to light that a company in China called New Star had originally bought the chinese distribution rights from Escom for 020, 030 and 040-based Amigas. Viscorp has since had several meetings with them to discuss future possibilities. It also seems that the Walker is unlikely to ever hit the streets.

Viscorp have also stated that a new machine (using RISC technology) isn't likely to be on sale within the next year, and there are no plans for a stopgap

In fact, VIScorp are currently undecided on which RISC chip to use and favour is falling away from the PowerPC standard. However, the company does see the Internet as a giant helping hand for Amiga support and updates and they are planning to operate a big server in order to try and meet Amiga users needs.



ON THE WEB WITH DEMON

Demon Internet Services, Europe's largest service provider, have announced that they are offering 5Mb of web space to all their dial-up account holders. Rather than being forced into a www.serviceprovider. co.uk/users/jbloggs/ kind of situation, Demon are offering their customers a far more professional and indeed unique www.nodename.demon.co.uk address. Demon are also offering four CGI-bin scripts to help your web pages along and placing no restrictions on whether the web space is used for commercial purposes, something that most ISPs want you to pay more for. For further details, give Demon a call on 0181 371 1234.

Future aims at early adopters with consumer technology mag



uture Publishing is to launch a consumer technology magazine targeted at the electronics marketeer's holy grail: the early adopter.

The magazine, entitled T3: Tomorrow's Technology Today, comes from the same stable as up-market technology titles such as Edge and .net: The Internet magazine and the first issue is due to appear in October.

The title will balance discussion of technology breakthroughs in areas such as home cinema, computing, photography, personal communications and hi-fi with reviews of the most innovative new devices. T3 will not

carry a lengthy buyers guide like many titles in the home electronics market, but will instead be features and

"T3 is an entirely new kind of magazine which reflects the way that technology has become an essential part of our lives - and that technology is great fun!" commented publisher Stuart Anderton. "T3 is a magazine for people who love technology; people who love what technology can do in their home and in their car. Our research shows that the same people who are into home cinema are also interested in the latest computing gear and in personal digital assistants. Now more than ever people are fascinated by the whole gamut of technological innovation as it affects them, and T3 will deliver features, news and reviews to satisfy that need.

But T3 will keep its feet firmly on the ground, says Anderton: "We won't be doing any California dreaming about the influence of technology on society. We'll be talking about the technology itself; the actual products which are here now or coming in the near future."

T3 will cost £2.95 and the launch is backed with above-the-line advertising in more than 20 consumer magazines and the national press, as well as promotions on the internet, London poster sites and at two consumer electronics exhibitions.

"We took a camera out around Bath and took a whole load of photies from all angles..."

IT'S BATH TIME

PAGE 25

Once you've read the review of OctaMED Soundstudio on page 64 of this issue you'll realise what a superb product it is. As a special offer to our readers you can obtain the brand new OctaMED Soundstudio at a reduced price providing you cut out and return this coupon with your order. Photocopies of this coupon are not accepted.

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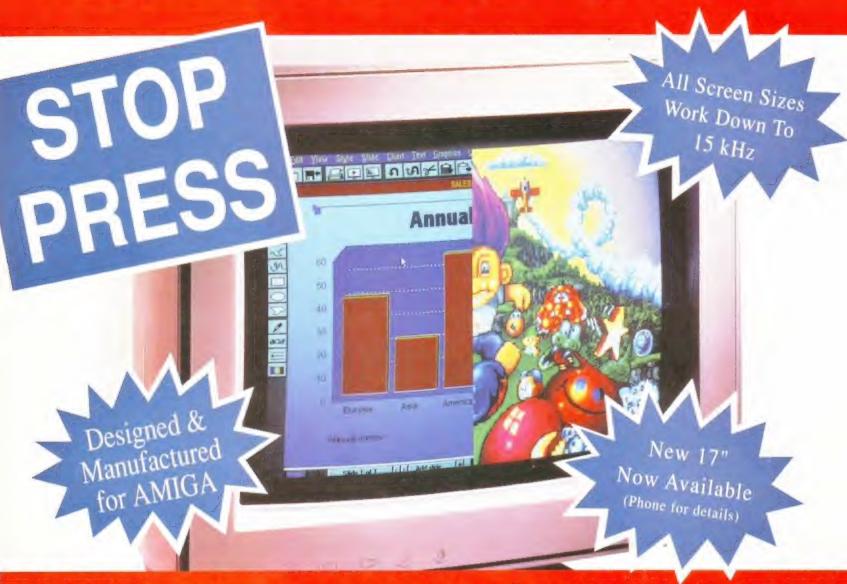
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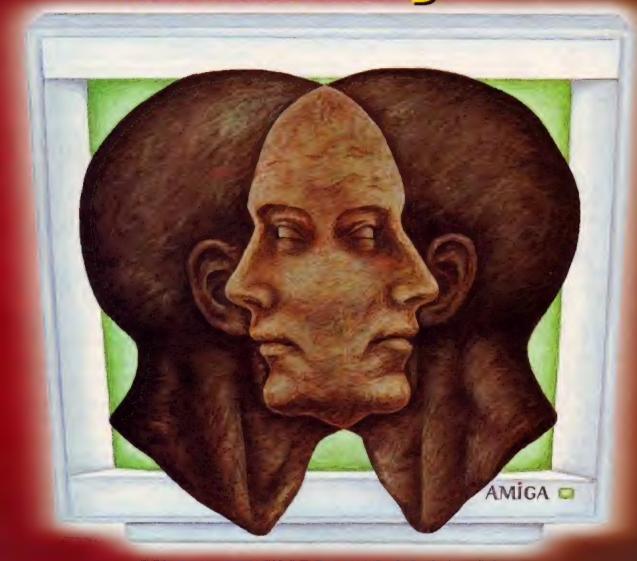
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EMULATION The sincerest form of flattery



Simon Goodwin explores the history of emulation and takes an in-depth look at all the systems currently available to the Amiga user

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Where did the concept of emulation come from?

An introduction to Apple Macintosh emulation

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HISTORY

The idea of emulation dates back to the first computer, designed - but never completed -- by Charles Babbage in the 1840s. In his 'Life of a Philosopher' Babbage explained that his Analytical Engine could perform ANY sequence of analytical operations on an unlimited number of figures, by trading time for capacity if necessary. In principle any computer can emulate any othergiven unlimited time to do the job!

A century later codebreaker Alan Turing documented a 'Universal Machine' that could perform any computable process. In 1937 this was just theory, but within a decade Turing and others built working digital computers, and problems of software compatibility were beginning.

The time needed to develop new hardware is dwarfed by the time spent converting existing programs that people would like to run on the new machine. Many computers have arrived, and worked, but disappeared for want of software support.

Most programs supplied with the original IBM PC were machine-translated from old 8080 assembly language into code for the newer 8088. This squandered speed, but gave the PC a foothold, so that enough machines could be sold to justify writing genuinely new software.

When Apple introduced 'Power Mac' systems they used new, cheap and speedy processors instead of the tried and trusted 68000-family chips. At first the Power Macs ran almost entirely as emulators, via two utilities - one that decoded 680XX instructions and one for Intel 80X86 programs.

Even now the majority of Mac software is emulated, rather than run as 'native' Power PC code. The jury is still out on the Power PC itself - 68060 and even 486 processor boards are still selling well - but it seems clear that emulation is here to stay, and will be more and more important in the future.

Amiga users benefit from a decade of programming effort. You can find Amiga-specific versions of most common software tools, but there are some, like Quark Xpress on the Mac, which have no equal on the Amiga. To run these, and stick with your existing Amiga investment, you need an emulator.

As computers advance it makes sense to use the hardware power of new machines to get old software working as soon as possible, even if it ends up slower than it might be if rewritten from scratch. Most emulators are slow because they must

COMPUTER GLOSSARY

Apple 2	One of the three first home computers (with
	Commodore's PET and Tandy's TRS-80 Model 1).

C16	Commodore 16, a cut down home micro similar to the
	C64 and Commodore Plus 4 - the home/business
	version of the C16.

Commodore 64, best-selling 64K 8-bit computer of the mid C64 1980s, made by the firm that later introduced the Amiga.

CPC Amstrad's 8-bit, Z80-based home computer, rival to Sinclair's ZX Spectrum and the Acorn BBC Micro.

CP/M Control Program for Microprocessors - the first OS to bridge the gap between different manufacturers' machines so they could share software; the precursor of MSDOS.

Mac(intosh) Apple's range of computers based on ideas invented at Xerox Palo Alto Research Centre, birthplace of Mice, Windows and Pointers.

MSDOS Crude single-tasking IBM compatible PC operating system.

MSX An eight bit home micro standard adopted by many manufacturers, mostly Japanese. Based on Microsoft ROMs & chips from the USA.

Oric 8-bit British home computer. Rivalled the Spectrum better sound but less software. Later sold to the French.

Personal Computer - usually refers to machines compatible with the Microsoft and Intel-based systems introduced by IBM in 1980.

OL Quantum Leap - the only British home computer based on the Motorola 680XX processor range, introduced (prematurely) in 1984.

Tandy's brand name for computers, mostly based on Z80 TRS-80 processors. Crude mono graphics and up to 48K memory.

VIC-20 Another Commodore micro, predecessor to the C64 but with just 5K of memory and relatively simple graphics.

ZX 81 The cheapest home computer ever. An intro to micros for millions in the early '80s: under £100 with 1K RAM.

ZX Spectrum The best-selling British micro ever, introduced by Sinclair in 1982 and subsequently developed by Amstrad. More famous for cheap and playable software than for its simple but effective hardware.







There are a range of Commodore 64 emulators enabling you to play classic favourites like TNT, Froot and Commando at the original speed and in the original display modes.

C64 EMULATORS

The Commodore 64 was the Amiga's precursor, from the same company, and many owners graduated to the Amiga. C64 was the first popular emulator, still available in version 2 from many PD libraries. It's slow but usable, even on an unexpanded A500.

Requests to load files and directories access Amiga disks, rather than the amazingly slow Commodore 1541 drive. It works like a real C64, with arcane commands like LOAD "\$".8:LIST to see the directory of a disk! Sound and sprites are emulated well, although sprites may flicker as ECS Amigas do not support the full C64 sprite width.

Later emulators have concentrated on accurate emulation of hardware tricks used in C64 demos, trading speed for accuracy of emulation. The most

extreme is Frodo, which needs a very fast Amiga to run at full C64 speed, but can emulate almost all the 64's hardware peculiarities.

A64 misses a few hardware tricks but is perhaps the most polished C64 emulation, with a built-in machine code monitor and support for genuine C64 hardware via the third serial port. It's shareware from PD libraries. The full version is on C64 Sensations CDs.

Magic 64, from Germany, won't save and lacks sound unless registered, but emulates most of the C64 graphics. AXF-64 is less comprehensive, but faster on limited hardware. Amiga C64 emulators do not seem to like Multisync displays though and I needed to disable mode promotion to get them to work on my A4000.

MAC EMULATION

One of the most successful areas for Amiga emulation is running Apple Macintosh software, Until recently Mac hardware was very expensive, even by Amiga standards, yet Macs were based on the same 68000-family chips as Amigas.

Consequently Mac programs run on the Amiga, without translation, as fast as real Macs with the same processor. And since the Amiga, unlike the Mac, is a multitasking machine, you can run other programs at the same time.

Amiga Mac emulators use a copy of the Mac system, normally held in a ROM chip and on disk, and intercept attempts to access Mac hardware, re-directing them to Amiga ports. It helps that most Mac programs are 'systemfriendly' and rarely try to use



Emulators enable you to run Mac software like Home Publisher 2.



Emplant and ShapeShifter both need System 7 which is easy to get hold of.

Apple hardware that may not exist in the emulator. The main exception is Mac MIDI programs, which try to hit the Mac serial port directly, and fail on emulators.

Older Macs had vari-speed disk drives, incompatible with all other computers. The first successful Amiga Mac Emulator, AMax, addressed this with hardware to connect a real Apple drive to the Amiga. Modern Macs use standard drives, compatible with HD drives in the Amiga 4000 and available as add-ons for other models.

Emplant is a very successful Mac emulator, based on a Zorro 2 card which serves as a 'dongle' to prevent illicit copying of the emulation software. Sockets allow Mac ROM images to be copied to Amiga drives. Optional 'AppleTalk' Mac networking hardware is great if you want to link Amigas and real Apples. Other options include a rudimentary SCSI interface and a sound input port, as yet unsupported.

Emplant ruled the roost for years, but it's been overtaken by ShapeShifter, a shareware Mac emulator which needs no special hardware. You still need a Mac ROM image, but Emplant comes with software for real Macs running system 7 or later, which copies the ROM to a PC-format disk for transfer to the Amiga. Both are Mac 2 emulators. requiring at least a 68020 and System 7, which you can download from Apple or find on Mac magazine cover CDs.

The unregistered ShapeShifter is quite usable, although it only supports hard files rather than hard disk partitions, making disk access very slow unless you allocate a few hundred K of disk

buffers for the relevant partition. I use the command ADDBUFFERS MISC: 1000 where MISC: is the device containing the hard files, immediately after starting the emulator. Registered users can access hard disk partitions and

access much faster. ShapeShifter has garnered more than 3,000 registrations at a price of \$40 or DM 50, prompting Utilities Unlimited to produce an undongled version, Emplant Lite. for A1200 as well as A3000 and A4000 systems.

Both Emplant and ShapeShifter work well on a monochrome screen, as on original Macs, but become painfully slow in colour, even on AGA Amigas.

The 16-colour ShapeShifter driver is almost unusable, and the 256-colour version is hopeless, even on fast Amigas, PD drivers improve the situation somewhat but colour displays are still very slow and jerky compared with a real Mac.

Emplant fares slightly better, thanks to patches into the Mac system which adapt it better to Amiga planar graphics. But both emulators benefit spectacularly from the presence of Zorro graphics cards, which support Apple-style chunky pixels. The 256-colour, 1024x768 pixel picture, shown at the top right of this column, comes from an Amiga 4000 with a Picasso 2 graphics card.

The combination of a fast A4000 and Zorro graphics card gives very convincing Mac emulation, and you've still got an Amiga in the same box.



A4000 and a Picasso graphics card.



AMax was the first Mac emulator to overcome the drive incompatabilities



Monochrome screen modes mean much faster emulation



Because of display mode differences, 16-colour mode can be very S L O W.

interpret and translate programs for one machine, instruction by instruction, to suit another, and it takes several new instructions to decode each old one.

Luckily computers keep getting faster so the overhead is tolerable, as long as you upgrade your hardware every few years. That's usually cheap compared with the cost of replacing your software and then learning how to use it all.

COMPATIBILITY

If you've already entered lots of data it can be difficult or time-consuming to convert it for a new package. With an appropriate emulator, you can carry on using your old software, and data. You might still need help to move the data onto the modern drives on your new machine, but a good emulator will make this relatively straight-forward.

Amiga 'handlers' can read disks from other systems as if they were in Amiga format. The best-known handler is Cross-DOS, bundled with Amigas since Workbench 2. This reads and writes the IBM PC disk format.

Others include AmiCDFS, BFFS, Cross-MAC, Messydos (for old Amigas) QLFileSystem and SP-handler. These do not solve the problem of running old software - they just transfer data from a variety of formats onto the Amiga - but they are often used by emulators to access files without worrying about where they're coming from.

Thus you can use PC, Spectrum, QL, MSX, Mac and Amiga floppies or CDs willy nilly, with no need to warn the computer or particular programs about what you're doing. If 720K and 880K formats are not suitable, HD, ED and old 5.25" minifloppy drives are available as options. The Amiga disk controller is unusually flexible, while other machines need extensive hardware modifications to read 'odd' formats, like genuine Amiga disks.

Several C64 emulators allow connections to old, peculiar 1541 drives, so users can move files onto Amiga hard disks, where they can be accessed faster and more conveniently. Most Spectrum software was on cassette, so Spectrum emulators load tapes through the Amiga's existing ports. Many emulators support serial transfers, so if you've still got an old machine you can squirt data from it directly into your Amiga.

These techniques involve a mix of hardware and software. On the

hardware side, you may just need a suitable lead, although some adapters need extra components. These can be made up commercially for people who'd rather pay than do it themselves.

There are three ways to emulate hard drives. The simplest is to add an extra drive and dedicate it to a particular emulator. This approach works well with the built-in Emplant SCSI interface.

It's more efficient to dedicate a partition - a section of an existing drive - to the emulator, storing files inside in the format expected by the emulated system. CrossDOS and BFFS handlers allow access to these files from Amiga programs, too.

The lazy approach is to create one big file on an existing Amiga partition, and treat that as a device in its own right, with emulator files and directory information inside. These 'Hard Files' do work, but are very slow because the

Continued overleaf ⇒





Amiga may have to read most of the file to find a particular entry inside.

AMIGA STRENGTHS

The Amiga design is particularly well suited to emulation. Amigas multitask, so they can emulate several computers at once. Each program or emulator can have its own screen, so emulators can use the display format that suits them best, and the user can scroll or swap between them.

Modern Amigas display up to 256-colours in a variety of modes. This is enough for all home computer displays but falls short of the latest Mac and PC screens, unless ingenious but slow HAM modes are used. PC Task, ShapeShifter and Emplant favour plug-in graphics cards for more colours and easier compatibility. AGA graphics are slow emulating systems with 'chunky pixels' so graphics boards are recommended for serious PC, Unix and Mac emulation in colour.

The Amiga's blitter can convert graphics automatically. QL and Atari ST screens use successive bytes for each colour, whereas the Amiga keeps each colour separately, as a 'bit plane'. Emulators use the blitter to extract interleaved bytes and write them to Amiga bit planes. Emulated programs carry on as if the interleaved display hardware is present. There's no need to intercept or translate each access to the screen.

The Amiga has hardware 'sprites' - image overlays that can

CROSS EMULATION

It's quite feasible to run one emulator on another - indeed, it's a good way to get the best emulation possible for a particular processor. One of the emulators should be running programs in native code. It's bound to be too slow if you've got one processor interpreting instructions for a second, to interpret a third.

Apple Mac emulators for Spectrum and C64, among others, work well on the Amiga under ShapeShifter or Emplant. Mac Speccy 1.1 is PD, fast and works even on a two-colour Shape-Shifter screen. Mac Spectacle is slower, needing at least 16-colours, letting you adjust the screen to suit your desktop. It's £10 shareware.

Emulators for Qdos proliferate, especially for the ZX Spectrum, unsuprisingly in view of its heritage.

move without disturbing the background picture. Sprites speed up emulation of similar hardware in C64 and MSX systems.

Amigas offer a choice of places to connect just about anything. There are three serial ports - the well-known one on the back panel, the keyboard one, and a third synchronous port, ideal for connecting C64 and VIC-20 disk drives and other custom serial devices.

Cassettes can load through joystick or serial sockets, or via a sound sampler

Most work well under Amiga Qdos, including Speculator 93, the PD predecessor of Amiga Speculator and Xtricator, a ZX-81 emulator. There are two good emulators for the Spectrum 128: ZM/3 and Spectator.

The most interesting Qdos emulator is ZM/HT, an advanced cross compiler which generates 68000 programs corresponding to Spectrum code on the fly. It's the only Z80 engine that runs at a reasonable speed even on standard 68000s. It's published by Ergon of Italy, with demos in Odos PD libraries.

NetBSD is not an emulator but a replacement operating system. This Amiga version of Unix supports many emulators including Spectrum, TRS-80, Apple 2, PC, SAM Coupe and many others, as well as Unix applications.

and the parallel port. The controller ports suit light pens, guns, paddles and proportional controllers, as well as mice and digital joysticks, so emulator users can plug in their old peripherals and use them just as they would on the original system.

Commodore changed the Amiga keyboard for the A1200, and this upsets some emulators. The A1200 - like most Macs - cannot detect combinations of more than two keys. This cripples keyboard controlled games - you might

EMULATORS

IBM-compatible PCs are the commonest computers in the world: several software-based Amiga

emulators run PC programs. but they're rather slow and limited. The shareware leader is Chris Hames' PC Task, currently at version 3.1. This emulates an 80286 processor (vintage 1982) with support for Amiga hard drives, printers and CD-ROMs. The unregistered version will not write to disk.

I've used a registered copy of PC Task 2 for several years, and found it a reliable, if slow, MSDOS emulator. The main advantage of PC Task 3 is emulation of VGA and some SVGA graphics modes, using AGA hardware.

PC Task can run Microsoft Windows, but painfully slowly. On the fastest 68060 Amigas it's the speed of an average 386; a 4000/030 runs PC code at half the speed of an old AT 286

PC Task's main rival is Emplant 586, from Utilities Unlimited. This 486 emulator supports the improved instruction set of later intel processors as well as floating-point operations, but it's still software based and runs at a fraction of the speed of a 'real' 486 - or 586, for that matter. It requires at least a 68020 with

Workbench 2, and displays are sluggish unless your system has hardware memory management.

It's hard to get Emplant 586 running because it needs a copy of the BIOS software from a real PC. That involves moving a PC chip to the Emplant hardware, and running an Amiga program to snaffle the code. Utilities Unlimited claim that almost any BIOS will work, but users report otherwise.

Commodore once bundled a PC emulator called Transformer with Amigas. It worked, even on an A500, and is still available from some PD libraries, but it's desperately slow. The 'Landmark' benchmark rated it as a 0.3 MHz 286, a small fraction of the speed of IBM's first, slowest model. Transformer only runs on 68000based Amigas, needs two disk drives, and crashes if it finds more than 512K of chip memory.

IBeM is another shareware PC emulator, compatible with processors from 68000 up to 68030. It emulates MDA text and CGA (four colour Lo-Res) graphics. but it is even slower than PC Task - Landmark rated our 25MHz A4000/030 as a 1.3MHz 286! The shareware version is limited to a 2Mb hard disk partition and stops automatically after only 15 minutes.

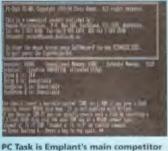
There have been hardwarebased PC emulations, most notably Commodore Bridgeboards and the AT-Once and Golden Gate models from German firm Vortex. These out-perform software-based emulators, but they're still slower than modern PCs. I'll discuss the problems of software PC emulation in detail in the future.



There have been hardware PC emulators, such as the Bridgeboard.



Most software PC emulations are tediously slow, even on an '060.



Emplant 586 is software based and

only runs very slowly

but it too is slow compared to PC's.



Transformer was bundled with early

Amigas by Commodore

press two keys to move diagonally, and find that the third 'fire' button is not recognised. Joystick emulation can circumvent this A1200 fault.

RIGHTS AND ROMS

Emulators recreate the software environment of the original computer, as well as the hardware. This usually involves running a copy of the built-in 'ROM' software, copyright property of the original manufacturer. For legal reasons, many emulators expect you to provide your own ROM image, particularly if you get the program from a large, international supplier like Aminet. Amstrad is the main exception, generously allowing their eight bit ROMs to be freely distributed with emulators.

Otherwise you need to make your own copy and transfer it to the Amiga by tape, disk or serial link, or track down a ready-made image on the Web or an FTP site. It is legal to use an image of software you already own in an emulator, but you should not grab a copy from someone else's computer and use it at the same time as they use the original. That's copyright theft.

The position is similar when it comes to emulator applications and games. Program snapshots and disk images are available on CDs and on the net, and it's quite legal to use them if you own the original.

Such files are convenient because many old programs came on protected disks or cassettes, hard to load on the original machines, let alone the emulator. But there's nothing – apart from the lack of instructions – to stop people who do not own the originals from swiping free copies of other people's copyrighted works. This frequently causes legal hassle.

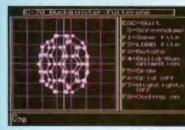
UAE

They said it couldn't be done and – for a decade, at least – they were right, but at last there's a working emulator that runs Amiga programs on other platforms. It's called UAE, originally known as the 'Unusable Amiga Emulator', even to its authors, as it was horribly slow and unreliable. Since then it's been upgraded to the point where some report that it runs hardware-banging games like *Turrican* and Amiga *Worms* at sensible speeds, at least on a 133 Mhz Pentium or faster...

UAE is written in C and has been compiled on various workstations and power desktop computers, including PCs, Macs and Unix boxes. There's even a version ported to the Amiga itself and while this may seem the height of gratuitous hackerdom it presents a practical way of running old Workbench 1.3 titles, with emulation of useful hardware like Action Replay, on otherwise incompatible top-flight Amigas with Workbench 3.1 and 68060s.

UAE emulates the Amiga 500/1000/2000. All you need is a Kickstart ROM image to get it running. The first version was

OTHER EMULATIONS



You can even emulate the pioneering Sinclair QL, if you really must.

Amigas can emulate most other mass market home computers, including the Atari ST, Acorn BBC Micro, Amstrad CPC, Sinclair QL, Atari 800, Commodore VIC 20, Oric Atmos and Tandy TRS-80.

Atari ST and Sinclair QL emulations are fast, as those machines use Motorola processors. The ST emulator works well with utilities and productivity software, but does not support hardware-banging ST games at all.

Sinclair's QL, based on the 8-bit version of the 68000, came out a year before the Amiga, with an excellent built-in programming language, reasonable graphics, and Qdos.
Emulation is almost perfect, although you need a 68030 or better for more than four colours.

Amiga Qdos suits processors from 68000 to 68060 and comes with Psion Xchange, a rather good floppy-based business package and a handler to read and write Qdos floppy disks from



The Oric didn't have great graphics, but it did have some great games.

the Amiga desktop, full source code and all the tools you need to reassemble your own version. Modern Amiga owners should be sure to get the current version, 3.23; earlier ones were not compatible with AGA or faster processors.

The VIC 20 emulator, Apple 2000, AmOric and EmuCPC are among the best of the Amiga home computer emulators. All are system friendly and run lots of software without problems.

The TRS-80 Level 3 emulator also works well, although slowly. The BBC emulator is fast as most of the ROM has been rewritten in Amiga code, but problems with unimplemented instructions on 68010 and above need curing with TUDE, an Aminet utility.

There's rumoured to be a Dragon 32 emulator in the works, and one for the text-based O5 Flex, but I've been unable to get the GameBoy emulators working and I've yet to try the Atari 800. Expect updates in future columns.

pathetically slow because it did realtime emulation of all the custom chips and DMA channels, but the current version is useable as it takes short cuts when it realises that a particular feature is not required. There's still a hardware problem with genuine Amiga disks, as only a real Amiga can read or write them, but you can get around this by loading disk images.

Authentic Amiga owners can sleep easy - UAE is slow on any but the fastest modern computer, and no match for an A1200 yet. It has bugs, and will need a lot of work to add support for AGA and 68020 instructions, even when computers are fast enough to make this a practical proposition. Even so it's an impressive achievement and – unlike several spoofs – it really does emulate the Amiga convincingly. UAE proves that any sufficiently fast computer can emulate any other. Emulation is truly the future of computing.

CD EMULATOR COMPILATIONS

The Speccy 96 CD contains snapshots of thousands of Spectrum games, half a dozen Amiga Spectrum emulators and others for PC, ST and Acorn Archimedes. It's a mixed bag, padded with over 50Mb of unrelated files from Aminet late last year, about 100Mb of PC shareware and 55Mb of clip art, with the Amiga GIF viewer VT.

Nonethless this is the most comprehensive collection this side of ftp.nvg.unit.no, and contains almost all the old Spectrum hits. The title most notable by its absence is David Braben's Elite, pulled after legal hassle. You also get Spectrum FAQ files (Frequently Asked Questions, with answers) and Spectrum manuals, supplied as ZIP archives in ASCII and Microsoft 'Write' formats.

collection. It includes full versions of the Amiga C64 emulator A64, Frodo (with source!), AXF-64 and Magic 64 (unregistered), a couple of PC Commodore 64 emulators, and one for Apple Mac (or emulations). Most of the disk is occupied by hundreds of tunes for the C64 SID chip, with an Amiga player, and thousands of demos and disk magazines, some dating back more than ten years. Games are notable by their absence – reputedly because of legal problems with Volume 1.

Despite its name, the 64 Sensations disk contains other Amiga emulators besides C64 ones. There's a rare Atari 800 emulator, Apple 2000 with the necessary ROM image, and the latest Emplant software, plus C64 emulators for PC and Mac.

Emulators Unlimited is an Amiga-specific compilation, best described as 'shovelware'.

Some of the emulators are way out of date – the Amiga Qdos version is the second release, more than six years old, buggy and

incompatible with AGA. The IBeM directory contains a shareware update without the documentation or mountlist needed to use it. The PC AT-emulator is useless unless you own AT-Once A500 hardware. Some of the 'emulators' are useless spoofs, and the Amstrad directory only contains the very limited CPE.

Despite its shortcomings this CD contains things that are available nowhere else, including lots of emulator source files, over 250 genuine C64 games and 2000 demos, hundreds of Spectrum snapshots and games for PC, Oric and Apple 2. There are ROM images for VIC, C64, Oric and Amiga. Useful though these undoubtedly are, some of them are clearly infringing copyright, and should not be used unless you already own legitimate copies. Contact: Weird Science Ltd, 1 Rowlandson Close, Leicester LE4 2SE.

AMIGA EMULATOR LOCATOR

Most emulators are available from Aminet, in the misc/emu directory. If you have no modem or CD-ROM drive, check out regular Amiga PD suppliers, most of whom have a good selection. This is not a complete list, but a good start. There's a selection of emulators on our cover CD, with more to follow. Check the new AF series for more emulator details, contacts and support.

A4 Commodore C16 and +4 emulator	PU
A64 Commodore 64 emulator	1
Ami-CPC 6128 emulator S 3 3 Amiga Qdos 3.23, QL emulator F 1 1 Amoric Oric 1 emulator F 0 16 Apple 2000 emulator F 0 16 Apple OnAmiga, Apple][emulator F 0 16 Atari 800 emulator F 6 18 Atari ST emulator F 6 2 AXF-64 Commodore 64 emulator S 0 2 C64 Emulator v2 (A500) F 15 2 Emplant 586DX emulator C 12 14 Emplant Mac 2 emulator C 12 5 FMSX, MSX 1 emulator F 0 2 Frodo, C64 emulator S 4 2 KGB Spectrum emulator F 6 2 McGavin Spectrum emulator F 0 9 MSX2 emulator S 0 2 PC-Task PC emulator S 0 5 Shapeshifter Apple Mac emulator S 0 5	2
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Speculator Spectrum emulator S 0 9	2
	2
Texas TI 99/4 emulator F 0 B	4
Transformer PC emulator F 15 14	0
TRS-80 Model 3 emulator \$ 7 8	3
UAE, Amiga emulator F 10 D	4
VIC-20 emulator F 0 11	3
ZXAM Spectrum emulator S 0 9	3

Status codes: 5 = Shareware, F = Free, C = Commercial

Recommended CPUs: 0 = 68000 only, 1 = 68000+, 2 = 68020+, 3 = 68030+, 4 = 68040+

Programs coded 0 need patches to run on CPUs other than 68000. Code 2 titles require an A1200 or better (speed, WB3 or 68070 instructions required). Most systems marked 3 will run, albeit very slowly, on a standard A1200.

WHERE TO GET THEM:

- O Aminet: ftp.doc.ic.ac.uk /pub/aminet - and regular CD compilations. For emulator news, check Usenet's comp.sys.amiga.emulations
- 1 Qubbesoft PD, Brunwin Road, Rayne, Braintree, Essex CM7 5BU, UK. also SJPD, 36 Eldwick Street, Burnley, Lancashire Both have Amiga Odos 3.23 and hundreds of PD QL disks.
- Atari, C64, C16/Plus4 and MSX software: ftp.funet.fi/pub/atari pub/cbm/c64 /pub/cbm/plus4 /pub/msx
- 3 Amstrad emulators and ROMs: ftp.ibp.fr /pub/amstrad/emulator Amstrad programs and ftp.nvg.unit.no/pub/cpc
- 4 Frodo and Shapeshifter: chauer@iphcip1.physik.unimainz.de Christian Bauer, Max-Planc-Str.60, 55124 Mainz, Germany

- http://www.Uni-Mainz.de/-bauec002/
- 5 Mac systems & support: ftp.support.apple.com
- 6 C64 CD: Weird Science. 1 Rowlandson Close, Leicester LE4 25E.
- 7 TRS-80 emulators: ftp.amigalib.com /pub/be/misc/ TRS-80 programs: ftp.kjsl.com /tandy (11pm to 6am GMT)
- R TI/994A files: ftp://solutions.solon.com/pub /ti99/
- 9 Spectrum programs and documentation ftp.nvg.unit.no/pub/sinclair
- http://www-users.informatik. rwth-aachen.de/-crux/ uae.html
- 11 VIC-20 archive: ftp.hrz.uni-kassel.de /pub/machines/vic-20

- 12 Utilities Unlimited, 3126 Maricopa #101. Lake Havasu City, AZ READE LISA: European distributor: Blittersoft. 6 Drakes Mews, Crownhill, Milton Keynes, Bucks MK8 0ER, UK.
- 13 Ouasar Distribution. PO Box 16, Southland, Victoria 3192, Australia.
- 14 PC: PD Soft. 217 Hamstel Road, Southend on Sea. Essex SS2 4LB
- 15 PD libraries including Smash PD and Oasis Computer Systems.
- 16 Apple 2 files: ftp.uni-kl.de/pub/apple2
- 17 Oric files: http://arlesienne.ensica.fr /LOCAL/ORIC
- 18 Atari eight bit files: ftp://atari.archive.umich.edu/ atari/8bit/

AMIGA SPECTRUM **EMULATORS**



Speculator is the latest ZX Spectrum emulator.

Amiga emulators abound for Sinclair's ZX Spectrum, a simple, popular Z80 based home computer. The first only worked on original 68000-based Amigas but new emulators run programs at full speed, given a 25MHz 68030 or better.

First out was KGB Spectrum which ran - rather slowly - on 68000-based Amigas only and was incompatible with Kickstart 2. It was written by Troels Noerdergard of Denmark, and reached version 1.3, running snapshot files from Amiga disk. A snapshot is an image of computer memory - in this case, 48K plus a few bytes of processor context.

Until recently the king of Spectrum emulators was Peter McGavin's Spectrum version 1.7. It loads snapshots from Amiga disks and cassettes via a sound sampler.

This 48K Spectrum emulator runs on any Amiga. It's slow, like all Z80 emulations, on a 68000; you need an accelerated A1200 to run programs at full Spectrum speed. A500 and A600 owners can still have fun with text adventure games, widely available as Spectrum PD.

ZXAM is a more recent release, by Tony Pomar of Spain. Originally AGA-only, it now runs on Amigas with at least Kickstart 2 and a 68020. A special version is needed for 68060 systems.

ZXAM is not the fastest, but has lots of nice Amigafriendly features. It multi-tasks and supports ARexx. It can load cassettes via the joystick port and a small hardware adaptor. It emulates the three channel Spectrum 128 sound chip, as well as the basic Spectrum hardware. A full Spectrum 128 version is in the works.

ZX Spectrum 4.71 is written by Jeroen Kwast for all Amigas. It's shareware and supports



Many leading programmers began with games like Manic Miner.

programs that use Sinclair's Interface 1 Spectrum add-on. although the required ROM image is not included. It includes a screen-print option. Despite the high version number, it's buggy and crashes on 68040 or above, even with caches disabled.

William James' Speculator is the latest Amiga Spectrum emulator. It out-runs the rest on some programs, and has several unique features. Keyboard handling is the best of the bunch and it can read lots of snapshot formats, although it needs particular file-name extensions to correctly identify some. It supports cassette loading, serial transfer from real Spectrums and includes a handler to read MGT format Spectrum disks just like standard Amiga or PC ones.

Speculator comes with a good manual and Z80 software tools including a labelling disassembler and a fast crossassembler that runs as an Amiga task. Spectrum printer commands LPRINT and LLIST are re-directed to the Amiga printer device, and it can compress snapshots and save screens.

Unusually, Speculator translates Spectrum display updates into Amiga form on the fly, rather than periodically rewriting the screen. This makes some programs faster and smoother but others slower. It supports multisync graphics modes, scan doubling to keep picture sizes consistent. and suits all Workbench 2 or 3 Amigas.

NEXT MONTH

This feature has taken a tour of the world of emulators and hopefully whetted your appetite for more. In months to come I'll look at existing and planned emulators in more detail, explaining how they work, and where to go for software and support.

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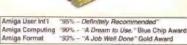
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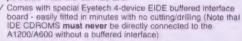


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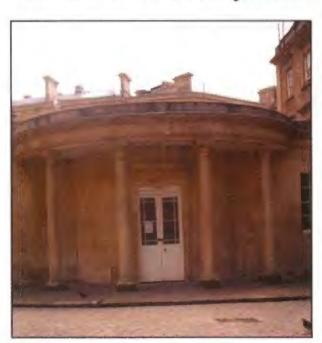
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This month we will be focusing on the graphic content of our production, what programs you can use and what

The Cross Bath at the end of Bath Street. Photo's a bit wonky so it will need processing.

MULTIMEDIA

CONTENTS

Intro. First steps and sorting out the graphics

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eda prest - Using sauce

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hardware you need. A selection of the images we will use for the production feature on this month's CD-ROM and, on future CDs, we will carry animations, sound samples and the finished product in a variety of formats.

The images on the CD, were taken with a little compact camera with as much of a zoom lens as you ever get on a box like this. I wandered around Bath and took a whole load of photies from all angles and these will be the basis for the user interface for the project.

After trudging around town for many hours, I had to decide on the method of development of these celluloid masterpieces. The final decision was based on the fact that since most of our readers are not likely to have 24-bit colour scanners, we would try out Boots' PhotoCD service and pass judgement on it.

The first thing to point out is that it isn't cheap. Boots charge £5 for the gold CD that your pictures will be put on and then every 36 picture roll of film will cost you £18.99 to put on the disc. You can take the disc back in to have more pics put on it (that's what multi-session means), but doing it this way means losing space on the disc, a bit like when you partition a drive. If you don't have the kind of bulk requirement that we did for this project, Boots do offer a single image transfer service which is only 65p per shot, although there is a minimum order of ten shots. All these prices were right at the time of going to press, but they might change - so don't take our word as gospel.

One other thing - most Boots branches won't have a PhotoCD processing plant (if any), so it takes a week to get your gold disc back, and the

prints they supply in addition to your digital images.

One advantage of using PhotoCD for the processing of your pics is that you will have the images there, ready to use, in a variety of resolutions from thumbnail to print. This will become more important as we explore further facets of multimedia production at a later date, but for the time being you will need to have some way of reading these PhotoCD images.

Continued overleaf ⇒

BELOW: Buildings can be hard to photograph adequately without masses of equipment. I lay on my back for this one.



3D packages are a useful commodity if you are generating objects for your user interface such as buttons and gadgets.

MISCELLANEOUS

Programs like Cinema4D which aren't too expensive are ideal for this kind of work as they can churn out high quality, but easy to produce imagery which can later be palette reduced to suit your application. Font Machine, the colourfont creator (there's a demo on this month's Coverdisk and CD) can be used to add more interesting typefaces to your production than the usual monochrome ones. Forge, a texture renderer for Imagine can be used to create seamless textures that you can tile for interesting backdrops.



CHAPTER DNE

PAINT PACKAGES

Deluxe Paint

DPaint is a long standing Amiga application, probably the one the machine is best known for. Although no longer in development it is still one of the most powerful programs available, and because it has been around for so long, almost everybody knows how to use it.



STRENGTHS: USER-FRIENDLINESS, THE FLEXIBILITY OF ITS TOOLS, ANIMATION MOVE WEAKNESSES: SLOWER THAN IT SHOULD BE, DOESN'T SUPPORT GRAPHICS CARDS

Personal Paint

Personal Paint rose from being almost unusably slow when it first came out, to being a bit of a speed demon with the latest release, version 6.4. New Amiga owners will know it best because it came bundled with all Amiga Technologies machines and although it looks very similar to DPaint on the surface, the image processing functions, storyboarded animation and RTG

support set it ahead of the pack.



STRENGTHS: IMAGE PROCESSING AND COLOUR REDUCTION FUNCTIONS, GRAPHICS CARD SUPPORT, MULTIPLE FILE FORMAT SUPPORT WEAKNESSES: NO HAM MODES, NO MOVE REQUESTOR, NON-STANDARD FILE REQUESTOR

Photogenics

Photogenics is a bit of a youngster in comparison to the previous two. Its latest version (2) is much faster than earlier efforts and has added new tools making it even more of a painters package. It works in 24bit all the time, even if your screen can only display 256colours and, as such, isn't geared to animation or icon creation in the same way that the previous two were.



STRENGTHS: GOOD TOOL SET, EXCELLENT FOR COMPOSITING
WEAKNESSES: UNFRIENDLY USER INTERFACE, STILL A BIT SLOW

TVPaint 3

TVPaint is like Photogenics in that it creates 24-bit images, but differs in the fact that it requires a graphics card to work on. Its range of tools, although small, can be extended through ARexx and it supports pressure sensitive graphics tablets better than any of the other programs here. TVPaint is an expensive option, but it offers the dedicated artist the easiest way of creating computer-based art.



STRENGTHS: EXCELLENT QUALITY AIRBRUSH AND OTHER PAINT TOOLS WEAKNESSES: PRICE (AND PRICE OF EQUIPMENT NEEDED)

We are going to cheat and put some IFF versions on the disc in addition to the PCD format images, but if you were doing this for yourself you would want some method of loading these images in and there are a variety of programs you can use for this. Firstly, there's the very popular Photogenics which will load PCD images in the lower resolutions (up to 768°512).

There's also a loader for ImageFX that will load in at all resolutions (including the 3072*2048 size). If you were sensible enough to buy AsimCDFS as your CD-ROM filing system, then you will be able to use PhotoCD images directly in any program that supports 24-bit ILBMs.

In the shareware scene there is, unfortunately, very little to simply convert PCDs into IFF ILBMs, and what there is tends to be complex and written in German. Still, you could try PhotoCDGUI_1.2 (you'll find it on this month's CD in the

"In_the_mag/multimedia/tools/" directory), it is in German, but it's pretty easy to understand, with a little experimentation.

ALTERED IMAGES

Even so, you will still need some sort of graphics manipulation program to allow you to massage these files into the sizes and colour depths useful for the application. Let's have a look at how these images will be used in the application, or at least, our current idea of how they will be used. It is very likely that the project will mutate over time in accordance with the clients wishes and as that happens we will have to adjust accordingly, bearing in mind the different requirements for our images.

Our initial design guide is to make sure that we present a consistent interface to the viewer and so we have decided to have a bank of buttons down the right-hand side of the screen with the main part of the screen taken up with one of two scales of maps, or showing details on individual items, such as the various tourist attractions scattered around Bath and its surrounds. We could draw all this from scratch, but there are numerous artwork CDs devoted to backdrops and patterns already available; two that spring to mind are

EMComputergraphic's superb Phase4 Desktop Video Dreams and the 1078 Weird Textures CDs. These can provide you with working material to use to ensure that your backgrounds aren't just bland areas of solid colour.

LOOK AHEAD

One thing you'll have to bear in mindwhen you are creating your user



ABOVE: Looking out from the Cross Bath we see the world famous Roman Baths.



ABOVE: If you have loads of cash, then the Circus is where you choose to live.

interface is what package you will be using to present it. CanDo has no trouble with buttons being odd shapes and it allows buttons to be animated. but Scala requires the button area to be rectangular and will only highlight the area you have clicked on - you can't have an alternate image for your button. So it's pointless you spending hours creating both images for your stunning 3D button, if only one is to

BELOW: Although Bath is predominantly a Georgian city, it also owes a great deal to Queen Victoria.





We won't actually be discussing which package we are going to use to put together the package for a few months yet, so it would be a bit pointless to go over it in any great depth right now, but it is something that you need to bear in mind.

GOOD PLANNING

Again, when it comes to what resolution you should be working at (both size and colour) it is worth bearing in mind how people will be accessing your program. Will they be looking at it on a TV set? If so, you will want to make sure that you don't have one pixel horizontal lines - they'll flicker like crazy. You need to ask whether the program you end up using supports the colour and size resolution you have chosen to

The weir below Pulteney Bridge. Looks nice, doesn't it? There's a pub down there too. MULTIMEDIA

I had to hold the camera through a grille for this one, ULTIMEDIA



CHAPTER ONE



adopt. I know it seems like a bit of a bore, but good planning is essential to a large project, it's no good working for six months on your production only to discover that the program you are going to use to put it all together can't handle branching paths or animations.

As for us, well, we're going to sit down first with paper and pencil rand beer) to plan out our attack on the huge amounts of data that we'll be dealing with. You shouldn't worry if art is not the skill you put first on a CV, scribbles with a biro can turn into something gorgeous once you start applying the helping hands of a computer paint package. No, your main requirement for this project is going to be staying power.

I know, because I've done this sort of thing before, just how tedious it can be to have to paste pictures into a frame for the 357th time, wishing that there was a macro recorder intelligent enough to choose the correct colour background for a picture that's really dark, or that can discern when your picture would look much better if it was on the right-hand side of the frame instead of the left. But no, you have to be the robot, sitting there for hours patiently entering in text, creating pictures or trimming sound samples.

But rest assured, if you have put the thought into the prelimmary design process, your production will be more accessible and the appreciation of the user will be worth every minute you spent hunched up over your desk.

We will be delving deeper into the specifics of the graphical side of the production next month when we look at how to take the perfect photo and the best ways of rendering those 3D gadgets and gizmos.

HANDY HARDWARE

Graphics cards

Graphics cards become particularly important if you are planning to make your application multiplatfor as they offer resolutions that match those on PCs and Macs. A graphics card can also show true 24-bit pictures which means that you won't have to work with an approximation all the time and they are faster than AGA graphics modes when you use 256-colours. The only downsides to graphics cards are that not every multimedia package will work with them, you have to have a big box Amiga to use them together with a decent monitor, and their cost. The best choices around at the moment are probably the Picasso card from Blittersoft (01908 261466) and the CyberVision from White Knight Technology (01920 822321)

Memory

You can never have enough of the stuff. Although programs like ImageFX and Photogenics offer virtual memory you should try to avoid this solution as much as possible. VMem is slow and not always that stable and it uses valuable hard drive space.

Hard drive space

Just like memory, you can never have too much hard drive space. A 1Gb SCSI or IDE drive will set you back only as much as it would've cost you to buy a 240Mb drive two years ago, so make sure you have enough space.

IMAGE PROCESING

ADPro

Art Department Professional (or ADPro as it is known) is the Grandaddy of Amiga image processing applications. It, like DPaint, is no longer in development and user interfaces have progressed since it was last updated, but ADPro is still very good at what it does:- converting one picture format to another and performing functions

If you intend to use Appro for a whole bunch of pictures, it would be best to also buy ProControl, an ARexxbased batch processor for ADPro. STRENGTHS: ARexx support, a wide variety of picture formats are supported.

WEAKNESSES: No internal virtual memory, non-visual user interface, no internal batch processing.

ImageFX

An excellent, constantly-developing image processor, ImageFX has just reached version 2.6. This version gives the Amiga artist even more tools to play with and improves several others. ImageFX has a visual user interface so that you can see the effect you are having on a picture and it also provides thumbnail previews of effects before you execute them STRENGTHS: Plenty of tools for your money, more file formats supported than ADPro, internal batch processor. **WEAKNESSES:** The user interface is confusing at times, thumbnail previews are too small most of the

Note that both Personal Paint 6.4 and Photogenics 2 have got image processing features.

Andy Smith

You'll notice, after a quick look through the Screenplay section, that Reader Games have taken a backseat this month. This is not due to lack of interest or submissions - on the contrary, we're getting more than ever, it's just that this month they've had to sit on

the side lines while we get on and review the glut of commercial releases that have arrived in the office this month.

Another quick look will tell you that not all of them were exactly, erm, welcome (just because it's a rare commercial release, don't expect us to show it any favouritism - in the same way we wouldn't down mark a Reader Game simply because it didn't come in a posh box), but it's very heartening to see them nonetheless.

And anyway, with a little planning and a following wind, you may well find some of the better Reader Games that feature in AF over the next few months becoming commercially available as software houses really start to take an interest. Now's the time to get that game into us - you never know who else may be reading...

Reader Games will be back with us next month, but in the meantime let's take a look at this month's titles:

the territories in the state of the

Every month we scour the world's software houses for the latest and greatest Amiga games. We try to ensure we keep you as up-to-date as possible and we'll stop at nothing to bring you the best, definitive, no-nonsense reviews of the

WHAT OUR REVIEW SCORES MEAN

The crème de la crème. Only the very best, most playable and original games are awarded an AF Gold - the most highly prized rating there is.

These games are very good, but due to minor flaws are not the finest examples of their genre.

Good games which are worth buying, especially if you have a special interest in a game type.

Average releases with somewhat limited gameplay and appeal. Games in this category tend to be flawed.

Below average games which are unlikely to impress your mates or your wallet. Avoid.

Overwhelmingly poor quality games with major flaws and appalling gameplay.

The absolute pits.

All the latest news and pictures of all the Amiga games that will soon be available for you to purchase. Oh yes.

BOGRATS

All Amigas Wulcan **(01705) 670269**

Vulcan won't mind me calling them stalwarts of the Amiga games scene. I've just looked it up and it means, amongst others redoubtable, robust, stout, strapping, sturdy, valiant and vigorous. Which is what they are when you think about them in the context of the Amiga games scene.

Bograts is a puzzle type game. Basically, you're this

You're the green thing. Your Bograts are those things underneath the picture.

character who's got to guide a couple of smaller characters to the exit of the level. The levels. surprisingly, are of the 2D platform variety. with switches to be pulled, traps to be avoided, ladders to be climbed and bombs to be dropped.

Although I don't like the Valhalia range of games because I find them far too

The state of the s

illogical and simplistic, I do like puzzle games where the solution may not be immediately obvious, but at least you can work out what you should be doing and you get the chance to learn from your mistakes. Rather than relying on the imaginative leap that needs to be made if you're to realise that getting the golden key involves putting salt on the slug. Which is the kind of thing that happened in Valhalla, I look forward to reviewing this one.

Vulcan reckon the game should be available in September, which means! shouldn't have to wait too long. Hurrah!



OTM **II** 1Mb Amigas **(01827) 312 302**

The name Enigma may not be familiar but that's just because you know it as Atrophy. I mean Atrocity. I mean it's called Enigma now. All right?

Gnomes, on the other hand, is new. Billing itself as a mixture between Super Mario and Lemmings. The idea is to save the gnomes. and the game boasts some

50 odd levels so there's going to be plenty of challenge as you try to round up all the gnomes and guide them to safety. This one's not due for release for a couple more months yet but we should have a review copy winging its way to us in the not too distant future so we'll be able to tell you just how well the blend of Mario and Lemmings works. Sounds good, at least eh?





TOP: Atrophy, Er. Atrocity... Eniama? ABOVE: Gnomes. We're intrigued.

DNA

All Amigas with 1.5Mb and above ■ Applaud Software ■ (01283) 217270

Subtitled the Variety of Life, this game – which is also Applaud Software's first toe in the pond of Amiga games – is a tactical wargame with genetic overtones. Apparently a whole load of baddies have been created after scientists discovered some alien genes. The genes were introduced to humans – who then went loopy.

It's down to the player to clear the 36 (viewed from above) sectors that make up the game with a little help from an android type thing. Much like Laser Squad or UFO, the

game uses the Action Points system whereby you have a set number of points to use up before ending your turn and letting the enemy have a go.

One of the most promising features of the game looks to be the fact that you can pick up genes from dead baddies, juggle them about, experiment with them and – if you find they're going to give your character some special advantage – introduce them into your character's *DNA*. We'll be checking out this mail order only game next month. Until then, look closely at your neighbour...



ABOVE: That's me and my robot chum in the bottom left. I can't see any baddies yet, but they'll be here soon, don't you worry.



Now, if I'd actually managed to get hold of a new gene this is where I'd come to find out what I can do with it. But as you can see I haven't got one yet.



Choose the area you want to conquer and then go conquer it. Then choose another one and do the same. And on and on until all sectors are conquered.

WINGNUTS

All Amigas ■ Forgotten Myths ■ (01846) 675453

Forgotten Myths are another new bunch having their first stab at a full-price game. Wingnuts is a combat game set on some alien planet. The action takes place in an arena where the combatants fly around trying to kill each other. In planes. And helicopters. And weather balloons. There's an airstrip on the ground of the arena, there's a large cloud-base halfway up (for hiding in me

thinks...) and above the cloudbase there's just thin air.

There are also a whole load of power ups and special items that can be picked up, or bought, as well as several game types including tunnel racing. So you don't have to limit yourself to just one-on-one dogfights. Although you could if that's all you wanted.

We're intrigued by the sound of this one and can't wait to get

our hands on the thing – Forgotten Myths are hoping for a September launch, but that could depend on what publishing deals materialise. Whatever happens, you'll hear about it here first.





Those planes look more like red swifts, or is it swallows? Anyway, looks like I should be shooting them...

RIGHT: Chartle eh readers? Programmers really should stick to programming sometimes and leave the gags alone.





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Reality

Packs 1 and 2

The Reality Software Construction Kit could breath new life into the Amiga

games scene.

Andy Smith checks out the bundles.



Underwater Capers: A not half bad shoot-em-up. In an underwater environment.

This one is Charlie Chimp 2. Here he's dodging some bouncing cans of 'a cola drink'.

The familiar Charlie Chimp. Collect things, take them to different places and use them. Then collect some other things

here are two of these games packs available at the moment: Reality Games Pack 1 and 2. You can buy them for £9.99 each (inc p+p) or £12.50 if you buy both at once. We're almost done with the mechanical information, it just remains for me to tell you that the 1st games pack contains: Underwater Capers, Charlie Chimp and the Treasure of Tutankhamun, The Wrath of Gwendor and Charlie Chimp Special Edition 96.

The second pack contains: Joker Poker, Toyland Capers, Charlie Chimp II Special Edition 96 and Charlie Chimp In The Great Escape. Let's have a look at each of 'em then:

Underwater Capers

Underwater shoot-em-up. Buy powerups from the underwater shop and then fight the mid and end of level guardians. Average to not bad.

Treasure of Tutankhamun

We put this platform adventurey type thing on the cover of AF issue 87. It was certainly good enough for us to use on the Coverdisk, but it's not exactly Format Gold material.

Wrath of Gwendor

Sideways scrolling beat-em-up, like the old Golden Axe or Altered Beast. But not quite as polished. Simplistic but moderately enjoyable.

Charlie Chimp Special Edition 96

There are 30 levels of platform action and BPM describe the game as 'one of the greatest platform games ever created'. I don't think it is. It's all right and better than most PD platty games but not by a huge margin.

Joker Poke

Fruit machine sim with a Play Your Cards Right sub-game. Win cyber-money™. Pointless but actually a bit of a lark. I liked this one the most

Toyland Capers

Another shootem-up. Again, it's not half bad. Not exactly Super Stardust, but competent and enjoyable to play.

Charlie Chimp II Special Edition 96

Erm, more Charlie Chimp stuff. But with new levels and new baddies. Fine, in an OK kinda way.

The Great Escape

Spook! Another Charlie Chimp plaform adventurey type thing. Just like Tutankhamun really, except in a different location. Again, not outstanding but not a complete turkey either (or should that be Poland? Groan).

All right so none of the games are breath-taking but with 8 games for £12.50 (a little more than £1.50 a shot) you can't really go wrong. Especially if you're a younger gamer who likes not-too-taxing platform games with lots of chimps in them.

Publisher **BPM Promotions 01232 626694**

£9.99 each or £12.50 for both (Mail order only) Demo version free to AF readers

Versions A1200

System requirements All Amigas

Release date
Out now from BPM Promotions,
8 Magnolia Park, Dunmurry,
Belfast, BT17 ODS,



GRAPHICS Not outstanding but not dreadful either.

SOUND This is one area that could have a little more attention paid to it.

ADDICTION Some games grab you but none are going to keep you enthralled for weeks.



PLAYABILITY All very easy to play. Some easier than others.

OVERALL VERDICT

None of it's really outstanding. but together they'll keep you



Charlie Chimp in all his glory. Platform action. Nothing stunning but fun for a short while.



That chimp again. This time in a prison camp. Complete with tanks and rats. And cans of oil.



Joker Poker: Gamble cybermoney^{IM} in an attempt to win more cybermoney Then play Play Your Cards Right.

In The House o Fun Adventure

Andy Smith hurls himself into the adventuresome house for some unadulterated fun.





The stars in the air should be collected for extra points. Although I don't know why you should get 700 for one and only 100 for another.

already - move through the levels collecting stars for its, firing other stars at an ortment of baddies that come owards you, jumping over gaps and lighting end-of-level bosses.

That's almost all there is to it. The only other bits are in the box-out elsewhere on this page (I can't direct you to the box-out because Linda, the not me). And it's quite fun to play as well. It's not amazing and it's not got anything that hasn't been seen before, but it's fun nonetheless.

Collect a power-up and watch as your little shooting stars turn into big shooting stars!

on the *House of Fun* by an evil clown. Stupid isn't it? Adrian Cummings is the man behind the conception, graphics, sound and coding, as well as the packaging design and artwork, which probably means he was involved in that stupid plot idea. I'm not having a pop Adrian. I know people expect some kind of reason to be playing a game, but this one's just so, oh I can't be bothered with it, let's get on to something else.

A LITTLE OIL CAN

A LITTLE OIL CAN
Maybe we should chat about what
other features are in the game? Like
how you shoot stars to kill the
baddies and how you can collect
power-ups that make your stars
bigger and porkier?

Maybe we should chat about the
fact that if Tin Toy doesn't kill a
baddie in time and they run into him
he loses some energy – which is
cleverly displayed as an oil gauge
(actually it's not that clever really, is
it?) – and Tin Toy can replenish lost
energy by collecting the little oil cans
that can be found lying around. In the
air sometimes. But hey! This is
fantasy, right? Anything goes here.

fantasy, right? Anything goes here.
What now? Andrea's going to
insist I write more words to fill up the
space between the pictures. But why?
You've played a hundred games like whether it's any good by looking at the score and the overall verdict, you've had a good look at the screenshots so you basically know all

A Nice Spell

Like that week we had back in June. (That was a nice spell.) Tin Toy has four spells, but they're like magical spells. Here's what they are, in fact. You don't get many, but you can find refills as you go around.



When you want to reach something above you, but you can't jump up to it, invoke this spell and you can float up into the air for a short time. It looks like Linda after one too many bottles of Hooch,



When you want to cross a body of water, or an area of apikes, invoke this apell and a big hat appears to carry you across. Yo have to be quick, though, because the hat it are to move as soon as it appears and you have to jump on quickly.



WHIRLWIND

This spell spins you across the landscape quickly, It's good for whizzing through baddles too, but no good for whizzing across spikes because it doesn't work. Like all the spells, the whirlwind doesn't last long; be warned.



SMART BOME

Invoke this and kill all the baddies on the screen. Just like a good Smart Bomb should. Oddly, the actual process involves *Tin Tey* removing his hat and a load of stars go shooting around the screen, killing baddies

informed buying decision. I bet you didn't know that Laura P Paul did the playtesting though. You would have found out if you'd bought the game

It comes on two disks, but you have to use DF0 when you need to swap — which is only the once — between disk 1 and disk 2. See? Now we're getting into the realms of too much information. I mean, you'd expect it on a couple of disks wouldn't you? It's only when games come on 12 or 14 disks that the number becomes a really his issue. And number becomes a really big issue. And another thing, just to make sure you don't miss it - this game's only available via mail order. That means you have to send some money off in the post and then receive the game back through the post. You can't just walk into your nearest Electronics Boutique or whatever and expect it to be on the shelf. It won't be. See?







landscape. There's an extra hat spell to be gained it only *Tin Toy* would just jump up and get it...



exe this intle cometo thing, that they're easier to kill it you manage to hit 'em.

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A1200

Release date

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GRAPHICS

All very nice and colourful. Better than average, but only just.



The tunes are fine; it's the dreadful sound effects I really found grating.

ADDICTION



Again, nothing truly amazing, but it's got a decent difficulty curve and plenty of challenge.

PLAYABILITY



-

Once you get going, you'll enjoy it. Unoriginal, but good fun nonetheless.

OVERALL VERDICT

It's a wacky, platty thing. Good fun to play and packed with ideas stolen from all over the place. Don't expect months of excitement, but it's competent and a jolly good giggle to play.



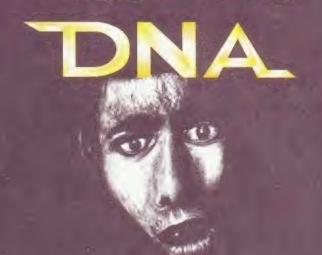
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ur most loyal readers may well remember the very first issue of Amiga Format, back in 1989, in which the very first Format Gold award went to a football game called Kick Off. The spooky thing is, I reviewed that game all those years ago and here I am reviewing the latest incarnation.

If you ever played Kick Off, or Kick Off 2, or Kick Off 3 or Kick Off 3 European Challenge, and surely most of you must have played one of those, you'll know how the first couple of games, with Dino Dini at the programming controls, were splendid.

You'll also know that when Dino moved on to other things and Steve Screech took over, he didn't manage to retain the sheer playability of the

Dino versions, but still managed to produce a couple of games that weren't half bad. They weren't brilliant, because changing the game's playing perspective from above to the side, kinda killed the way the game played. The magic was lost.

HARD WORK

The perspective's changed again for Kick Off '96, from the side to the more conventional lengthways viewpoint, but it's still not from above. There's even a 3D 'from-behind-the-goal' viewpoint, but this doesn't work well at all. This damn thing is just such a chore to play. I know you don't have

> LEFT: An action replay of a goal being scored in 3D mode. What was that keeper thinking of?

BELOW: Here you can create your own Dream Team, using players from such footballing nations as Azerbaian.



Action Replay

1:20

Andy Smith reviews a trusty, old footie game - but can this new version live up to its reputation?



to have the game viewed from above for it to be a goodie - witness Total Football (AF86; 90%), for example, but you do need to be able to control your players, make passes, shoot for goal and use skill to beat the opposition. You won't get the chance to do any of that in Kick Off '96.

Here's a little fun thing you'll want to do if you ever play this; when you've got possession of the ball, just hold down the fire button and keep it held while you roll around the floor laughing as your mate attempts to tackle the ball off you. What fun!

PASSING TIME

You might even want to try holding down the fire button and just watch the match-clock tick down, You might even find, as I did, that when you do this, you go into injury time that can last 10-20 minutes of real time. This happens before half-time, as well as before the end of the match proper.

Continued overleaf ⇒

The European Championships. England have won apparently. Hurrah for us! Of course, had I been playing we wouldn't have made the

more traditional

2D view. And

Holland are on

their way to a

forgettable victory.

AND ADD ADD TO
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Action Replay 1 2:16 9
The

second round. Championship Finan-Ruanten Finals Seni finals Vinal Spain Spain Scotland Cookia Russia Creatia Cookie England France England England England Czech Repblic Tunkey Tunkey Hext Batch Last Match Creatia Predict Watch.

วิฤษณ์ มี วิฤษณ์ ยิ 🕅

 On the most memorable occasion it happened to me,
 Holland managed to score 12 goals in injury time against me.

We're now going to start on the European Championship competition that comes pre-set with the game. Recently, I tore into Sensible Soccer's European Championship Edition because it didn't take into account the introduction of the Golden Goal rule (the first team to score in extra time from the Quarter Finals onwards would win the match).



ABOVE: Here's my player holding the ball while the Dutch attempt, in vain, to get it off me. If I was winning, I'd just do this until the clock ran down.

Well, the same's true here. Get to the Quarter Finals and you're into extra time and then penalties (to be fair, there is the option to turn off extra time and penalties from the options menu should you so desire).

OUT OF CONTROL

But, rule omissions aside, it's down on the pitch that things really count and it's down on the pitch that this game really starts to fall over.

Your player's highlighted with a black star, showing who's under your control, and the number of times the control switches to someone you don't want it to is outrageous.

There's not even a button you can press to change players voluntarily. Truly ridiculous!

Oh yeah, before I forget, if you play the game with a single-fire button joystick (like a Speedking, for example), you won't be able to make passes to your team mates if you are running with the ball. Or moving with the ball at all...

RIGHT: This is nonsense. One of my players is in the middle of this Dutch gang. I didn't press any fire buttons and so this continued for about five real minutes.



And here's another funny thing, and Nick will back me up on this because he was watching the game with me at the time... I was checking out the game in 3D mode, playing the European Championships to investigate the Golden Goal rule.

My team got knocked out, so I watched a couple of computer teams in one of the semis – Spain vs Scotland.

WHAT IS GOING ON?

After full time, the score was 2-2; great, the Golden Goal was on. The first half of extra time passed without incident and soon after the start of the second half, Spain made a dash for the Scottish goal.

Unfortunately, one of the Spanish players went down, in their own half, with an injury. The rest of the team seemed to carry on and, would you believe it, they scored.

I expected the game to end there and I would applaud Kick Off '96 for at least including one of the major rule changes of the Championships. But no! For some reason the ball came back to the bloke lying injured and a free kick was awarded!

Not only that, but the teams played out the rest of extra time without scoring. Now, guess the scoreline at the end of the game? Yup you got it, Spain 3 – Scotland 2. What is going on? Crap is what's going on, I'm afraid.

Time for the final paragraph then. Kick Off '96 is dreadful. I've played around with better reader games. Don't be mislead by the fact that Anco have used the name Kick Off on the box – this game is just pants.



LEFT: Goalmouth action at the other end of the pitch. And the grass behind the goal goes wild! Well it will, if left for a couple of years...



of a deck of cards.

ADDICTION
Almost none at all. You'll think the minimum three minute game time for

Appalling. The ball being kicked sounds like

someone rifling the end

each half is two and a half minutes too long.

PLAYABILITY

As close to unplayable as they could have got it. Oreadful, dreadful, DREADFUL!

OVERALL VERDICT

It brings a lump to your throat when you think how Anco have completely ruined the brilliant name that was Kick Off. This game is absolute rubbish and I will never play it again. I hope I've saved you ever having to play it too.

9%

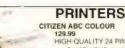


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ricket has never been one of my favourite games. In fact I don't like it very much at all. I don't like playing this game either, but that's because I don't like cricket computer games. I can tell you it's good though and I can tell you that if you have even the vaguest interest in the sport that you're going to like this.

Essentially it's the same as Audiogenic's earlier cricket games that use the same engine (Battle For the Ashes, Grahame Gooch World Class Cricket and Brian Lara Cricket) but with some added extra features and some really annoying gameplay flaws rectified.

SECOND OVER

New features include a beefed up computer opponent (it's not so easy



...the ball sails into the hands of the waiting fielder. If you were controlling the fielder there'd be a big white star under you.



Hold down fire when you make a stroke and if you get the timing right the ball will sail over the boundary for a six. Just like here.

The only six **Andy Smith** ever gets are of 'the best' variety. I think you know what we mean.

to thrash a team when you're playing an International) and the introduction of an Arcade option. There are 12 international teams and 18 county sides included, with 1996 stats, you can select to field yourself or have it done automatically. This is probably one of the biggest improvements because now, when you're fielding for yourself, you can choose which end you want to throw the ball to. And fielding for yourself is surprisingly easy once you've spent a few minutes practising.

There's also the inclusion of the Six-Hit button. This is basically an option whereby you can hold down the fire button before you make a batting stroke and if you get the timing right you can attempt to knock the ball out of the park. It takes some getting used to but it's a welcome inclusion.

As for the rest of the gameplay, well it's pretty much the same. It's had a couple of bits polished and spruced up, but essentially it's like all the others that have come out of the same stable (to mix a sporting metaphor). That doesn't mean it's going to get downmarked – Audiogenic have made a real effort with this one and it's worth applauding them for finally listening to what people have been telling them for years.

As for the fact that I don't like cricket, that doesn't matter. This is top-drawer stuff that works well and is enjoyable to play. You want to be playing it in two-player mode because it's more fun, but you'll still find it challenging enough on your own to keep you at the crease for a good long while.



The scoreboard at the end of the over shows that England have got off to a good start against the West Indies. There's still that Lara chap to dispose of though.



Versions A1200

System requirements All Amigas with 1Mb

Release date Out Now



GRAPHICS
They're not stunning, but they're fine.



Not a lot to get you excited here but, then again, what did you expect?



ADDICTION
Hmmm. Once you get
going it's hard to resist.



PLAYABILITY
Not the easiest, but put a little effort in and you'll pick it up soon enough.

OVERALL VERDICT

This is great. They've improved the annoying bits and kept the core of the satisfying gameplay.

88º/o

yours!

Only you know lurk around the

to win! to win! to win! to win! to wi

Design your own level for Team 17's
Alien Breed 3D II - The Killing Grounds,
and soon you could be whizzing down
sinister corridors at breakneck speed
courtesy of a brand new Blizzard 1260
accelerator! Alien Breed 3D II was created
to take advantage of the
phenomenal power
available to
accelerated Amiga
owners - now that
power can be

All you have to do is design your own level for the game. You can draw it out anyway you like, using the AB3D II Editors (included with the game) as an IFF graphic, or on the back of an envelope. Just make sure it is legible, and you should probably have a key, explaining the detail in the map. You could also include pictures of aliens you could populate the level with, weapons and wall textures – basically anything you want. The winner will have produced the most exciting, novel or unusual level, as decided by the judges.



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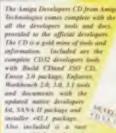
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The section of the magazine devoted purely to furthering your enjoyment of games. By cheating your way past the really hard bits and getting to look at parts of the game you might otherwise never see.

FLIGHT OF THE AMAZON QUEEN. AGAIN.



Pick up Lola. Yeah, like she's really gonna go for that cheap hat and leather jacket outfit. You've got to have jeans that hang round your knees with your underpants out these days.

Right, an explanation: Steve McGill got halfway through delivering a full solution to this game before disappearing off. He didn't tell anyone else where he'd left the rest of the solution, because he didn't know himself.

After being inundated with letters from you asking for the rest of the solution we're going to start again (the reason for starting again is that the first half was written by Chris Osborne of Merseyside and this one's written by Spiros Konstantis of Warwickshire and the solutions are slightly different).

Look, just follow this solution from the beginning and you'll be absolutely fine. Trust me...

PART 1: GETTING STARTED.

Use the curtain cord and pick up the wig that is on the table. Pick up the sheet and the other sheet. Use either sheet on the other sheet and then use the sheet rope on the radiator. Next, use the rope to climb down the laundry chute.

Move the ladder and pick up the , comedy breasts and the crowbar. Go back up the laundry chute and use the crowbar on the chest then look at the

chest. Go down the chute and walk to the door up the stairs.

Talk to the bellboy about the key and convince him to give it to you. Pick up the key and use it on the red door downstairs.

Talk to Lola and when she gets into the shower give her the towel. Use the dress, go upstairs and walk to the truck. Pick up the hay, pick up the oil and use it on Rico in the car.

PART 2: THE AMAZON JUNGLE.

When you crash, look at the waterlogged seats and open the duffel bag. Look at it and open the plane's hatch. Talk to Sparky and get the beef jerky.

Go outside and give the beef jerky to the piranhas and pick up the propeller. Use the knife on the lily stem and use the propeller on the lily pad. Next, walk to the path at the top of the screen and cut the vine with your knife.

Go back to the crash site and down the path on the left. Use the vine on the support rope and pick up the banana. Go back up the other path. When you find the gorilla, talk to him and convince him that gorillas don't exist in the Amazon.

Walk to the pinnacle and go to Trader Bob's. Talk to him, give him the beef jerky and buy the vacuum cleaner. Go back to the pinnacle and walk to the jungle. Go up the top path until you reach two men. Talk to Bud and tell him that you will find a cure for his rash, then talk to Skip and convince him to give you the comic book (the one that Sparky wants).

Look at the comic and use the torn page on the comic coupon. Go right twice and down and give the banana to the monkey with the coconut. Go up and tell the gorilla in the suit that he doesn't exist again and go through the hollow log.

Go up the path, use the vacuum cleaner on the wasps and pick up the orchid. Walk to the right and look at the carvings. After watching the Amazon woman, do what she did. Talk to the bedraggled prisoner and get the puppet. Apologise to Faye and

Go back to Trader Bob's, give him the orchid and pick up the fishing net. Go to the crash site and give the comic book to Sparky. Use the fishing net on the perfume and pick up another banana from the same place as last time. Walk to the jungle and catch the beetle with the fishing net.



At least walking to the desk is possible - no matter how vestmently challenged you are.



Oh my goodness. A picture with no 'easy to write a caption clue'. How on earth am I going to get through this...

Continued overleaf ⇒



She looks like our Linda. Except she's got dark hair and our Linda's a blonde. Legs are about the same though. Except Linda's are real of course. Therefore much nicer.

HELPING HANDS



And this really could be our Andrea. But with a pony-tail. That fringe is probably hiding her other eye which points in the opposite direction to the other one

- Now go to the mission and exchange the file for her dictionary. Now go to Trader Bob's and give Naomi the perfume. Go outside and use the knife on the coconut. Talk to the witch doctor about a rash cure and give her the coconut and vacuum cleaner. Go to the Floda camp and pick up the flower. Go inside and walk past the secretary.

She will stop you so tell her that you're the fumigator. Go to the kitchen and talk to the cook. Give him the banana and pick up the dog food and the cheese bits. Go right, open the mail bag and look at it. Open the foot locker and pick up the squeaky toy. Go outside and give the squeaky toy to the dog. Now go to the jungle and give the flower to the sloth.

Use the scissors on the sloth and give the hair to the witch doctor. Go back to the jungle and give the lotion to Bud. Go to Trader Bob's and buy the record. Now go to the Floda camp's library and look at the couch.

Use the record on the phonogram and use the lift to go down. Open the red door and look at the boxes. Use the can opener on the dog food can and then go back upstairs. Next, walk down and give the letter to John.

Open the first door and look at the duty roster (note the name of the colonel). Open the second door and move the cabinet. Go out and go down twice. Open the blue door and tell the soldier that he's needed for kitchen duty.

Open the brown door, pick up the book and use the knife on it. Go right twice and then go up to the fire exit. Pick up the super weenie serum and use it on the dog food. Walk up the stairs and use the key in the door. Use the mannequins, talk to Azura and use the wall panel

Go back inside, pick up the pencil and use the elevator. Give the dog food to Klunk and start a fight. Open the green door and use the pencil on the writing pad. Go back to the room with the safe in it and use the piece of paper on the safe. Open it and look at it.

Go to the hut the dog was guarding and use the key on the padlock. Get the rocket pack and walk to the Amazon fortress. Go to the jetty, talk to Charon and give him the beetle and tell him that you want to go to Sloth Island.

PART THREE: SLOTH ISLAND.

Walk to the temple. Go through any door and pick up all the bodies, some should produce bones so pick them up too. Do this in the next room too. When you find the dinorat give it the cheese bits. Go to the entrance room and put all the bones, apart from the arm bone, in their appropriate holes.

Use the arm bone on the socket and put a coin in the slot. Move the arm bone and walk through the door. After you get rid of the ghost go to the door on the right.

Keep going until you find the zombie women. Talk to the leader and convince her to open the sarcophagus. Pick up the mummy wrappings and convince her to open it again. Open the sarcophagus, pick up the crown and use the knife on the



It is, indeed, a pretty bird. It's probably a clue or even possibly an integral part of the whole story. You'll just have to get the game, read the tips and find out for yourselves, won't you?

That'll be the Amazon Queen then. And this bloke's probably the pilot or something like that.



Use. Use what? Use the comic book on the keyhole! Yeah, that's bound to work. I'll bet people have tried it.

to ask for some 0 looked

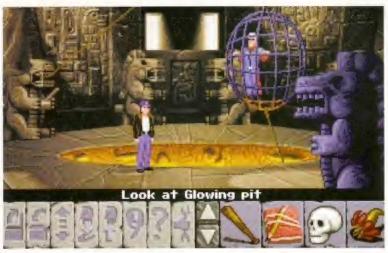




ZO

SORCERER ш

44



It's a pit. And it glows. I bet the chap hanging over it would rather he wasn't. And how come skulls always have the jaw-bone still in place? I always thought they fell off rather easily...

sarcophagus. Move the sarcophagus and go through the door.

Use the knife on the tree sap and pick some up. Move the fountain head and pick up the blue jewel. Go left (don't use the lever) and use the puppet on the stone disc. Now go and use the lever. Walk to the mouth and use the stone disc on the spindle then use the vine on the spindle. Go back down and connect the vine to the pulley.

Use the bat on the pulley and go and pick up the pick. Go back out and use the bat on the pulley again. Now go back up and enter the door. Use the pick on the stalactite and pick up the flint. Use the flint on the lighter side and use the mummy wrappings on the arm bone. Use the lighter on the makeshift torch and use the pick on the hole to the left.

Go back to the giant statue and enter the left door. Use the lit torch on the snake and walk through the door. Walk to the door with the light and

then go right. Look at the support rope and use the lever. Tell lan to untie the rope and use the lever again.

Go through the door and walk left. Pick up the big stick and walk to the sarcophagus door. Use the tree sap on the bat, then pick up some more tree sap and use it on the stone bit. Go left and look at lan's pulverised body. Use the chunk of rock on the sticky stone bit.

Now go back to the door you made with the pick and use the big stick on the crypt. Look at the crypt and use the mummy wrappings on the mask. Walk to the place where the red heat rays are and use the mask on the lizard's heads.

Before you enter, go up the stairs until you find the body and then look at it. Now go through the door and use the sticky bat on the green jewel. Next, go to the statue and insert the two jewels into the statue's eyes.

Go through the right door and use the stone key on the statue. Go down twice and give the cheese bits to the dinorat then follow it.

Keep doing this until you reach a room. Move both wall panels and look at the markings. Go through the door on the right and press these buttons (starting from left to right):

1st = the second button on the bottom layer and

2nd (when the patterns change) = the third button on the layer above the one you just used.

Go through the door, give the crown to the ghost and pick up the skull. Go back to the other room and use the chair. Next, go to Trader Bob's and buy some alcohol. Put the alcohol into the rocket pack and then you need to go to the pinnacle and use the rocket pack.

PART FOUR: VALLEY OF THE MISTS

Follow Faye. Walk to the distant clearing then to the clearing and use the knife on the branches. Give the branches to the dinosaur and go left. Use the horn to scare away the dinosaur and go to the right.

When the monsters start fighting, pick up the gun and use it on Frank. Talk to Faye and tell her to turn round her mirror then use the gun on Frank again. Next, give the mask to Sparky and then use the gun on Frank (for the last time).

GENERAL TIPS

1. Talk to every character in the game (until they start repeating their words).

2. Look at all the objects that you pick up or you won't be able to make any progress in the game.

> Spiros Konstantis Stratford-upon-Avon

Continued overleaf ⇒

BELOW: Comic japery in Flight of the Amazon Queen. Obviously. Actually, there are clues here.











20 in the ш

Monmouth

Bath

EL PING

CHARLIE CHIMP AND THE TREASURE OF TUTANKHAMUN (AFCoverdisk 87b)





A room, With a door, Windows, One, two, three, four. Ready to play? What's the day?

rom the start room, pick up the skeleton key and use it to unlock the cell door. Go right until you reach the room with the door and go through it. Head right to the Chapel and talk to the man in there. Pick up the water potion. Head left and go back through the door again. Next go down and pour the water potion into the water. Now you can enter the water.

In the Underwater location, talk to the mermaid and then go left and up. In this room collect the chicken. Go back the way you came and return to the chapel. From here, go down, and follow the layout of the game until you reach the Cellar location. Talk to the woman there and give her the chicken. She will give you a jar of wine in return. Go up and then through the door.

You emerge into a room with two doors. Go through the left door. You'll enter the Guarded room. Give the iar of wine to the guard and he'll let you into the Treasure room. Collect the golden dagger and from the Treasure room return to the Chapel heading left until you reach the king. Give him the dagger and collect the bag of sweets he gives you in return.

Head back to the Chapel, From here, go down, left, down, right, through the door, left, down, and right. You should be in the Pleasure Dome. Talk to the princess and give her the bag of sweets. Take the ring she gives you and go back the way you came. Return to the Underwater location and give the ring to the mermaid. She gives you her heart (aah! How sweet!) and you should take this to the Chapel and give the heart to the man there. He gives you a book of music in return. From here, go down, left, down, right, down and left. Give the book of music to the flute player and take his old flute. Return to the Pleasure Dome (surely you know the route by now?) and head right past the princess. Get as close as you safely can to the snake and play the flute. The snake runs off, so get the fire potion and return to the Underwater location. Go left, up and left. Pour the fire potion into the lava and collect the key.

Finally, take this key to the Treasure chamber where you collected the golden dagger and use the key to unlock the chest.

> Chris Spicer, Weddington



Och look! A skull without the jaw-bone. You don't see many of those around in Amiga games.



Pick things up and use them. Drop other things you don't want to use. Progress will be yours.



Charley in some creepy dungeons. Yesterday. Looks more like Nick's flat. On a good day.



Terrible. This was the end screen after Cathy's first attempt at this wonderful game. Then she read the tips.

UFO

(A1200 version)

Gamers beware! This little tip involves playing around with the game's code using a Hex editor - if you're already confused then don't bother trying it. If you're comfy with Hex then read on - but note: Amiga Format will take no responsibility for you messing up your game disks if it all goes wrong.

Back up your save disk and then load up your hex editor. Now insert your save disk, go into the drawer that you have been using to save the game in and load the liglob.dat file. When it's loaded, change the first eight numbers to: 64646464, then save it. This should give you 1.68 billion pounds when you load the save game back in and start playing.

> Alisdair Comb Blyth





TOP: Spooky scary tension as the troops prepare to barrel into the ation's ship blind. Fools.

LEFT: Take that Mr Alien. See? Now I've read the tips I'm going to be unstoppable. Hurrah!

WATCHTOWER

Watchtower has proved pretty hard for a lot of you so OTM have finally decided to release some of the level codes. Hurrah! Simply type these in, and play away...

When asked to enter code xxxxx from page x, enter one of these codes below instead and the cheat mode will be activated

Next, you will be asked to enter a code xxxxx from page x again, this time enter either another cheat code. or enter the correct code from the manual to start playing.

LEVELS	
Second	14127
Third	15364
Fourth	85488
Fifth	19491
Sixth	02179

But, for some really groovy things try these codes:

Infinite lives	54266
Infinite grenades	47773
Infinite time	68978

There you go, you should now be able to get a lot further in the game than you did before. Don't forget to send in all your hints and tips folks. Not everyone's as thoughtful as OTM when it comes to releasing codes and passwords and the like.

RIGHT: Two yast and trunkless tracks of steel stand in the desert. Near them on the sand, half sunk, a shattered hull lies, who's barrel.



ABOVE: Four blokes in Rambo pose and a funny boat thing with a gun turret on the front. Yesterday. When the sea was all green.

HISTORYLINE 1914-18

This may be a few years old now, but it's still a goodie and it's just been rereleased on the Combat Classics 3 compilation. And anyway, as well as all the codes for the French option (that reminds me of a trip I had to Amsterdam once...), here are all the codes for the Central European Powers

LEVEL	FRENCHCODE	CENTRAL EUROPEAN POWER	LEVEL	FRENCHCODE	CENTRAL EUROPEAN POWER
1	PULSE	PULSE	13	SIGNS	GOTHA
2	GOOSE	CIVIL	14	HOUSE	BALON
3	SPORT	MOUSE	15	SIGMA	PAUSE
4	BIMBO	VENOM	16	SEVEN	ELITE
5	TEMPO	NOISE	17	ZOMBI	INFRA
6	BARON	RIGHT	18	MOVES	HILLS
7	BUMMM	ORKAN	19	BLADE	COBRA
8	LEVEL	FRONT	20	ZORRO	ATLAS
9	TOXIN	RATIO	21	STONE	AMPER
10	PRINC	PARTS	22	MOSEL	RHEIN
11	CLEAN	PLANE	23	ORDER	CANDL
12	XENON	FLAME	24	SODOM	STERN

P. Casson Bristol.

Don't really know what this has got to do with the game.

BELOW:

This is more like it. Planes. tanks and dirt big gun emplacements.





ALIEN BREED 3D

Again, this little tippet involves playing around with the game's code so only proceed if you're confident. The same Amiga Format disclaimer as the one above applies here too...

To get Alien Breed 3D to run from your hard disk, drag the disk 2 icon into your AB3D drawer. Then use a text editor to edit the ALIENBREED3D file and add /AB3D2 to the second assign command. Save this as a replacement for the original and boot up as normal. It still asks for the second disk but just click the mouse button to proceed.

> Steve James Cardiff



And you thought I was going to make some crass remark about this looking like some member of the team or other, didn't you? Well, I can't. I've run out of capt

TIP. TIPPETY TOP

Your tips are needed. Here's where you can actively help but fellowmembers of the Amiga gaming community, and at the same time swagger around with a self-satisfied grin, by sending in hints and tips on the latest games.

If they're good and work and are at least sort-of-current itten there's a good chance they'll get in print. You'll become famous overnight and someone who's not as good at games as you will be able to get more from their Amiga - and maybe they'll continue playing for a while longer. Soud all your hints and tips to: GameBusters, Amiga Format, 30, Monmouth St. Bath.



Capital Punishment could take fighting games into the next millennium."

"Capital Punishment has been proclaimed as the ultimate video game:"

Annua Format

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Assist Harvey Williams

formal clkbomisticity





Alien's not tough enough? Levels too easy? Want to map your mate's head on top of those flying things? Now you have the technology.

Andy Clitheroe introduces this guide to creating your own Killing Ground.

TIME TO MAKE A ROOM!

Click on the add point button and put four points on the screen like so:



ust when you think it's safe to switch off your gently smouldering Amiga power-supply, put your feet up and wave a cheery goodbye to the game you've sweated over for almost a year, someone pops up and says something like 'Hey, since there's all these editors and stuff in your game, how about some tutorials to explain to Joe Public what they're all about?'

So here I am, shackled once again to my faithful A1200, frantically trying to remember how everything works, like an A-Level student asked a Physics question two weeks after the exam. This tutorial will lead you through the first stages in designing your own levels, after which you should be able to expand and develop your own ideas.

First of all, make sure the game, and the editors, are installed on your hard drive. Then follow the instructions on the fix disk supplied. This should take a few minutes, so I'm going to slope off for a cup of tea. Let me know when you've finished.

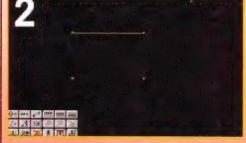
Mmmm, that since. Where was 1? Oh yes. Now, although the editors can be run from Workberich, you'll find it a lot more convenient in the long run to use the SHELL as your base of operations, so open one up and type.

AB3:

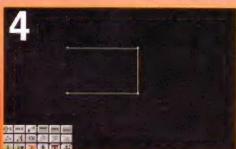
Now type

LEVED not a the level edition

Now click in the 'new zone' button and join the four points in clockwise order, finishing on the one you began with.







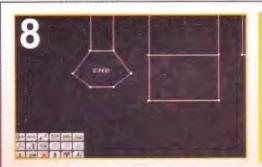


Put in some more points which you can join up in the same way, producing a slightly more complex level. Remember, zones MUST be convex (have no 'dents' in the sides).



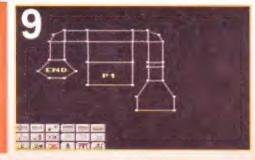


eed 3D GROUNDS



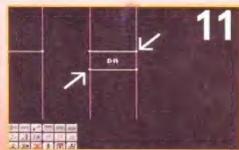
Now the level as it stands isn't terribly useful, because the end zone is where we want to put the player. Select the 'little man' icon, move the cursor over a different zone and press 'e'. This places the end zone somewhere more difficult to reach.

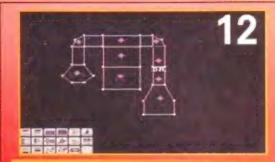
This leaves the way free for the player start position to be placed in that zone. Next, click with the LEFT mouse button and hey presto!



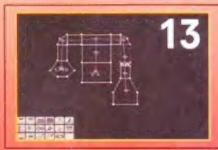
Okay, enough easy stuff. Time for something a little trickier, like, ooh, a door! Click on 'define door', then select an appropriate zone with the RIGHT mouse button. Press 'r'. This defines the roof of the zone as a door. Then select a neighbouring zone with the RIGHT mouse button and click with the LEFT mouse button on the point which will form the LEFT end of the wall which borders the door zone. Repeat this for any zones bordering the door zone.



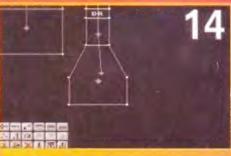




Set up the parameters for the door, giving it a raise and lower speed, and a delay before closing. If you want to see the level now, click on the 'Define clip file' button, type A, then press 'S' and then type 'a'. Quit the editor, run the linkup program, type 'a' when prompted, then type 'pm a' and 'pgc a' into the shell prompt. You can now run your level! When you've finished, reset and reload the editor. Time for an alien, hidden behind that door. First though, we need control points so it doesn't just bumble about doing nothing. Click on 'add control point' and place control points on your map – generally anywhere there's a corner or a junction.



Click on the 'link control points' button and link all the points in both directions (ie click on one point, then a second (resulting in a red arrow) then the second AGAIN, then the first again (resulting in a pale blue line)). Once you've done that, you should see something like this.



Now link every zone to a nearby control point. Click on 'link zone to control pt', select a zone with the RIGHT mouse button and then a nearby (and accessible) control point with the LEFT button. Repeat this for all zones. Zones can share control points, you can put several control points in a zone (although you can only link the zone to one of them), and a zone does not HAVE to contain a control point (but it must be linked to one nearby). Select 'add object'

and click with the LEFT button in the zone behind the door. An alien! This is, of course, only a minute fraction of the features available for editing, but that's a story for another time. Try expanding your level with stairs, more rooms, big caverns, more aliens – anything you want! If you're VERY lucky, I'll be back next time with more help on some of the more obscure but satisfying parts of the editing package.

That's

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PED select

A game, an art package, programming aid, video tools... This month, Robert Polding reviews a truly mixed bag of goodies. Something for everyone!

SHAPES MANAGER

By	John J. Cassar
Ware	Freeware
PD Library	Various
No of Dishs	One
PriceDef	bending on library

This little program will be cherished by all Blitz 2.1 users. It is designed to grab, paste and edit shapes (such as sprites), for use in Blitz 2.1 programs and games. The interface is simple and looks superb, although the menus don't fit too well on a low-res screen.

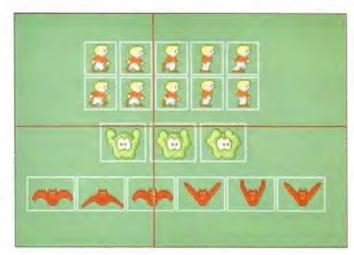
This programme must not be mistaken for an art package, because it has no drawing facilities, but is to be used in conjunction with one.

The program is very easy to use: you simply load the image, draw boxes around the objects you want to use and enter the Edit mode. Here you can animate, rotate, flip, cut, paste and generally improve your sprites.

There are several example screens provided, so you can grab and animate a few sprites, and get the hang of the program.

This is a very effective program, and makes the Blitz Basic package even easier to use (unbelievably), it is also so easy to use any user should be able to create their own sprites

If you use Blitz, then this is an invaluable purchase, and should be available from all major P.D. libraries.



NAVIGATOR TITLER PRO 2.0

By	Michiel den Oute
	Shareware
PD Library	Variou
No of Disks	Ona
-	Depending on librar

As you should know, the Amiga is one of the best machines for video work;

Continued overleaf ⇒

SHAPES MANAGER: You simply load the image, draw boxes around the objects you want to use and enter the Edit mode. Here you can animate, rotate, flip, cut, paste and generally improve your sprites



Size A	djust	Siz	e Ei	t	Flip X	Swap	Undo	-30	
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atton [- +	Right	-	+	Rotate	Animate	Exit	4-	-

Posselect ion of the month **J-WINDOWS**

By annius resident states and the states and the states and the states are states as the states are states are states as the states are states a	John Houseley
Were	Licenceware
	FI Licenceware
	£4.99 + 75p P&P

First lent a lot of people to 81/2 844/2 Oni of the maje reasons for this is the support. heingsahleite Open vindewssahduise

this exconsion aims to solve this and adds about 200 new commands that allow Amos to use gadtaols. There have been are the "fastest seen yet" and it certailly

been several that create look-alike Workbench windows on Amos screens), but used the failure to be compeny reporter also allows you to use the AGA chipset.

It gives you full control over Workbench eplacement for the Arros the hand's system (about time), and several utilities

AmigaGuide format, so it is easy to read an

and most efficient programming language. The price is excellent, as other extensions similar to this retail at £30 and still aren't as



TOP: Using the full multi-tasking environment, and allowing you to use the AGA chipset.

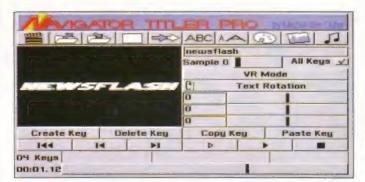
MIDDLE: J-Windows adds about 200 new commands that let Amos use gadtools

BOTTOM: ...giving you full control over

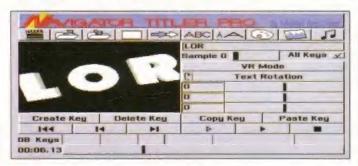


OS Friendly Amou.

OCTOBER 1996 53



NAVIGATOR: The program has been designed with both the expert and beginner in mind.



NAVIGATOR: Assigning sound samples and shaping letters is a doddle with NTitler.

its video output, combined with a cheap genlock, can produce excellent results.

The author claims this titler is "designed for ease-of-use and speed" and "the use of virtual reality techniques makes NTitler about 100 times faster than traditional 3D animation systems". These are quite extreme claims, but are they justified?

I feel that to a certain extent they are. This is a package that has an excellent interface, including a realtime preview window, and is so easy to operate a console user wouldn't be lost.

The program has been designed with both the expert and beginner in mind, as there are options to either use the program on its own, or export in Anim-5 format and use it with your own programs.

It is, however, designed as a system that can do almost all the features you could need (for basic titling), such as assigning sound samples and shaping letters.

There is also the NWiper program

LETS' LEARN: RIGHT: Stop

clowning around! Time for some serious learning.

LETS' LEARN-

BELOW: The games are designed with very simple, bright graphics and there are various animations when you win or lose.





provided that allows you to wipe screens, wrap pictures around shapes and animate them.

Combined, these utilities could be used for many different productions, from Aunt Martha's wedding to a small news production. This is shareware and if you want to use it regularly you should register and then you can begin producing your very own films!

REFLECTIONS **ART PACKAGE**

By	Axis Design
Ware	Licenceware
PD Library	SeaSoft
No of Disks	
Price	£4.00

There is little choice when it comes to decent art packages that don't cost an arm and a leg. This is one that SeaSoft claim to be: "a commercialquality art package... with every possible painting option included," and it does almost live up to this.

The interface is similar to that of

the now ageing Photon Paint package; it has a horizontal icon bar containing all the features of the program. While it is an excellent package, it doesn't have the speed and flexibility of the current market leaders, such as Personal Paint.

This is suited to people who don't need the complex image processing features of other packages and want a cheap and reliable package. It has some unique (although not all useful) features, such as the ability to play music while using the programme.

It is fairly fast and easy-to-use, and has a disk full of examples for you to play with. It supports HAM and all standard screenmodes. Some of the tools are outdated, such as the text tool, as you can't type directly on to the page.

These small problems shouldn't stop you buying the package since it is still good and probably one of the best licenceware art packages around. If you haven't got any modern art packages, then this is a sensible option, especially when programs such as DPaint retail at around £50.

LET'S LEARN 2

By	Horizon Software
Ware	Licenceware
PD Library	SeaSoft
No of Disks	One
Price	£3.50

Educational programs are great for your computer, especially if kids can enjoy using them and gain something from them.

This Amos-written program is designed for 5-8 year old kids and has a simple, large interface that makes the programme perfect for the age group. There are instructions for the parents included, but none for the children since they must work it out for themselves!

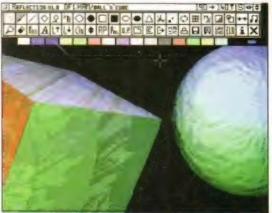
The games are designed with very simple, bright graphics and there are various animations when you win or lose. The speed of the package is reasonable, although the animations are quite slow and jerky. The major problem is the sound.

Rather than using sampled



BELOW: A commercial-quality painting package for £4.00. Sounds too good to be true?





REFLECTIONS: This program is suited to people who don't need the complex image processing features of other packages.



VARK: The disk is well laid out using MagicWB drawers and nice icons.

sounds, the internal Amos sounds are used and anyone who has heard these will know how irritating they can be. They may not prove much of a problem for the kids, but could drive the parents crazy if the children keep winning, so it would be best to give the child a walkman while playing!

The games included are Anagrams, Mazes, Pairs, Time and Sequences, and each have different characters for the child to play with. This is only of real use to younger children due to the levels, that are very easy throughout.

This is a good package that could improve many aspects of a child's learning and, moreover, it's fun.

VARK 13

By	Vark
Ware	Freeware
PD Library	Roberta Smith DTP
No of Disks	One
Price	90p + 50p P&P

This is yet another offering from the popular Vark series of compilations. It contains a very wide range of utilities, from game patches to pointer animators.

The quality of the utilities on this

VARK: This compilation disk contains a very wide range of utilities, from game patches to pointer animators.



disk are variable, from good to very poor. They do all have a use, however, and some good points.

The best utility for me was the DMS interface written in Blitz. This is smart and easy to use, and looks cracking. There are several utilities for specific pieces of hardware/software, such as a Zappo CD booting utility and a cheat for Tower Assault.

The disk is well laid out, using MagicWB drawers and nice icons for the programs. There is also a new version of the Installer program included, written by Amiga Technologies, that has new features and has been optimised.

There is also an AmiTCP set-up program for modem users and a new AmigaGuide viewer. To get the best use of the disk, you need to be using MagicWB and have 16 colours or over on Workbench, but most of the programs don't need this

This is a well-polished compilation that could prove useful if you have any of the programmes or hardware that is supported and is freeware, so it doesn't cost too much.

You are a secret agent and have to explore various levels to find objects, while avoiding booby traps. Sounds familiar?

DREAMSTREAM

Ву	Horizon Software
*	Licenceware
PD Library	SeaSoft
	One
	£3.50

This was originally going to be a commercial game, but never made it, so is now licenceware. The game is quite hard and is not for people who are easily frustrated, as you only have one life

You are a secret agent in the game, and have to explore various levels to find objects, while avoiding booby traps, turrets and other strange

enemies. You are armed with a pistol, the ability to use things and to leap over gaps in the floor.

The levels are well-drawn, though the sprites are very small. The sound is adequate and the shooting adds atmosphere to the game.

This is a well-presented production, with a clear opening screen and a simple introduction to the plot. Unfortunately though, the controls are slow to respond sometimes and there is also a serious problem here because the character can't move diagonally. If this had been implemented and the player given more than one life, the game would be more addictive.

As it stands, it is OK, but that's it, If you are patient and like puzzleaction games, you may like this, but don't expect to get hooked.

TOP 10 PUBLIC DOMAIN TITLES

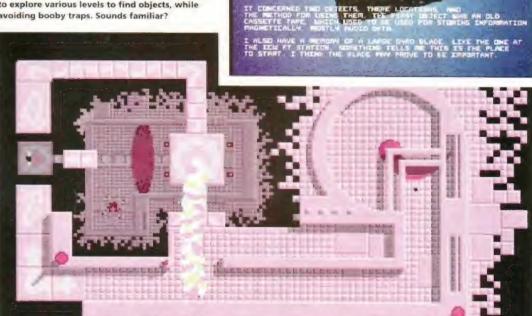
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- 1. Famous Ladies 8 colour backdrops 2. AmiCDFS v2.21 3. Voyager - web
- 4. Full GUI Internet Pack (24 disks)
- 5. Magic Trek Icon Pack 6. Magical User
- Interface (MUI) v3.3 (2 disks) 7. Magic Trek Back
- Pack 8. Virus Checker v8.3
- 9. Online Games Pack 10. Bloodfest v22
- (2 disks)

M: You've only got one life - don't waste it!





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X-DVE 2.5 and take the opportunity to upgrade at a special AF price ...p68

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SERIOUS UPDATE



Whether you are looking for a hard drive, want to get to grips with image manipulation, or try your hand at some desktop video work we have all the information that you need.

The musicians amongst you will be pleased to find out that OctaMED Soundstudio is now ready, both in the floppy and CD versions. With 64-channel sound and now with

improved direct to disk recording, this package has progressed from a programmers tool to a fully featured music package. And you still don't need to be a musician to create some great sounds - but don't take my word for it, read the review and then check out our very special reader offer on page 14.

REVIEWS

58 IMAGEFX 2.6
Widely appreciated for its extensive range of picture and animation file formats, ImageFX is getting better still. Version 2.6 sees a multitude of new features and Ben Vost has been taking a good look at them.

63 INSTANT DRIVE

Attaching a hard drive can be complicated and many people are put off. This latest drive from Eyetech is not called Instant for nothing though. Turn to Dave Taylor's review and find out just how easy expansion can be.

64 OCTAMED SOUNDSTUDIO
It must be one of the Amiga's favourite programs. John Kennedy is our resident musical expert and he's given OctaMED Soundstudio the once over.

68 X-DVE 2.5

The first version of X-DVE featured on last month's Coverdisk. This issue
Dave Taylor reviews the very latest version 2.5. What new features are there and just
how useful are they? Read on to find out and don't miss the chance to upgrade from
your Coverdisk – turn to page 78 to take advantage of our superb offer.

ImageFX has long been a favourite in the Amiga Format offices, this new version only improves its image.

Image is everything



LIQUID - Get that groovy wobbly look. Check out the pointy elbow on Cathy!

hile ASDG, Electronic Arts and many other software companies devoted to graphics products have quit the Amiga scene, the guys behind ImageFX have just kept plugging away, adding new features and refining old ones. (There's a table of the new features on the opposite page if you just can't wait to see what's in the box). Hopefully, if there's time, there will also be example animations for some of the new effects in the In_the_Mag/ImageFX drawer on the CD.

So what do you get for your upgrade price? There's a set of five disks for installing ImageFX and it's extras and an addendum to the 2.0 manual. This addendum is much thicker than the one I received with ImageFX 2.1 – but then a lot has gone on since then (and it also contains the addenda for all versions from 2.0).

One of the main things that people like about ImageFX is its support for such a wide range of picture and animation file formats and various image-related peripherals. This is improved in the current version even

further with support for the SCSI version of Epson scanners (finally!) and for Newtek's ancient Digiview Gold, although not in a PAL configuration alas.

For Video Toaster/Flyer users (again, not many of those in the UK), ImageFX now saves Flyer images as well as loading them and the whole interface is much more tightly integrated with the Video Toaster environment. Fargo's new Fotofun, a printer that can print onto mugs or print postcards, also now has a driver. But you can look that lot up in the table.

The interface has been improved for a lot of the tools that *ImageFX* users





LIGHTNING - Do it yourself Kirlian photography with ImageFX.

take for granted, including adding new methods to the Gaussian Blur tool

The main panel hasn't changed at all in the progression to version 2.6 – it's still as confusing as ever, but veterans should have no trouble finding their way around.

However, and this criticism has been levelled at previous versions too, it is still an awkward program to use at times. For instance, ImageFX's AutoFX and IMP programs are supposed to make batch processing simple. Nova even give you what they call EOT scripts, that's Effects Over Time to you and me, but AutoFX has to have a sequence of files to work from. It can't just keep reloading the same picture which means that you need to have

FIRE - While I have told my colleagues to go to hell on numerous occasions, ImageFX gives me the opportunity to send them there.

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ANIM Speed:		3	
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WHAT'S NEW IN 2.6?

Updated Video Toaster support

Not that it matters much to PAL Amiga owners, but ImageFX now supports the full Toaster 4.1 software including the scanner renderer and preview modules. Clips can now be saved back to the Flyer as well as loaded.

Updated CyberGraphX support
 This has been improved to fully allow 24-bit brushes and complete compatibility in CineMorph.

• Fotofun driver

A driver has been added for Fargo's new Fotofun printer.

SuperPrefs Printer

This replaces ImageFX's previous printer output preferences and offers the ability to allow ImageFX to render the image for the printer, rather than using Workbench.

ScanJet update

The ScanJet scanner module now support the 3c and 4c models and SCSI is now supported through more controller cards than previously.

Digiview Support

ImageFX can now be used for scanning using Newtek's old Digiview digitiser. It doesn't appear to support PAL modes though.

Wireless No

A flying wire removal program. This is what the big special effects studios use to make you think that Peter Pan can really fly. We will be trying it out and putting the results on the CD-ROM as soon as Andy's leg gets better (he was trying to fly without a wire).

IMP and AutoFX updated

IMP has had an option added that allows you to skip frames in a sequence to get a quicker idea of what your batch will turn out like and AutoFX now has a file counter.

Lightning module

You can now have multiple bolts of lightning rendered at the same time and the slider that was previously used for randomise has turned into a random number generator button, a far more sensible idea.

Bubble

Once you've got fed up making Aero adverts this, like a lot of special effects filters, will soon lose its appeal, but until then, you can put loads of coloured bubbles all over your picture.

Colour Balance

This tool will help you colour correct an image if, for example, your scanner has a green tone overall, this will help rebalance your images.

Displace

This tool used to be called Distort, but obviously it was felt that having a tool called Distort in the Distort menu would probably lead to confusion hence the name change. That having been said, the new Displace function is far more powerful than the original.

• FilmGrain

Want to give your animations that gritty film feel rather than cleaner-than-clean video? FilmGrain allows you to add a specified amount of noise to your image to simulate conditions on celluloid.

Fire

This is a major new effect which works well. Simulate fires as small as a candle's flame or as large as a forest fire by altering the parameters. You can have either wood or gas flames. Wood burns across a yellow-red range and gas is blue. The effect can be animated, but don't expect a looping animation because of the fractal nature of the flames that.

Gaussian Blur

A panel dedicated to the best of blurs instead of just a convolution matrix, *ImageFX* provides you with two algorithms for your blurring requirements.

Liquid

Liquid is another wave generator which pulls the image round rather than distorting it. Remember the "Give it Away" video by the Red Hot Chilli Peppers? Then you'll know what the effect is like.

Remove Grain

The opposite to the FilmGrain effect, this one comes in particularly handy when scanning printed colour images.

Sparkle

This is one effect you won't use much. It adds a starburst to any pixels that fulfil the criteria you set.

Sponge

This new drawmode behaves just like the Dodge tool in *Photoshop* and picks colour up off your picture as though the image were wet and you were dabbing at it with a sponge.



BUBBLES - Now it looks like they've been transplanted from a Smarties ad.

masses of hard drive space to achieve anything worthwhile. (There is a script that will take one picture and clone it with a new numeric extension for as many frames as you require).

There also seems to be a bit of a problem with the Lightning module. It completely ignores any regions you have set up for masking areas of your picture. This is a great shame because the module has been vastly improved, with the ability to just have the branches from a bolt rendered, instead of the whole thing, multiple strikes rather than just one at a time (although here I would like to see the ability to save the parameters for one strike and then apply them to all the others I have created), and a simplified interface.

In conclusion then, ImageFX in its current incarnation is a great piece of software. It has loads of new features and the team behind it are obviously committed to pushing the envelope as far as it will go.

I would love to see a major change in the interface for version three that increases the user-friendliness to match most of today's applications, otherwise ImageFX could find itself ignored in favour of the new breed of image processing applications like Photogenics 2 and Art Effect.

The Program doesn't really need any new features added to its already

large range, it just needs better access to those features. So, to anyone who has an earlier version of ImageFX I say, yes, rush out and get your upgrade. To people who have never previously used ImageFX I say yes, go and get it, but be warned, you won't find it easy to get to grips with.

And to Nova Design themselves I say, this is a smashing bit of software, but take a look at how other software houses are putting together their graphics applications and take some leaves out of their books. ImageFX is too damned awkward to use at the moment and it needs some massaging.

....

IMAGEFX 2.6

....

DISTRIBUTOR

Wizard Developments 01322 527800

PRICE

£149.99 (ask about upgrade pricing)

SYSTEM REQUIREMENTS

Min 2Mb & hard drive, Workbench 2.04.

SPEED

Not bad, but it could certainly be improved. It would be nice to do something else while waiting for a redraw.

MANUAL

ImageFX's manual is clear and concise.
The Addendum isn't bad either.

ACCESSIBILITY

ImageFX has always had a somewhat confusing interface design.

FEATURES

Second to none in terms of the sheer quantity of its features, *imageFX* has now increased its lead even further.

VALUE

Without a doubt, you certainly get good value for money. How much do you think it costs the big studios for a wire removal package?

"ImageFX is the archetypal flawed genius. It just needs an interface rework to be perfect."

80%



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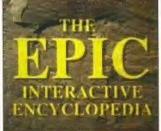
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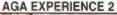


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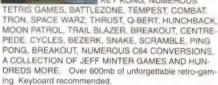


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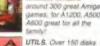
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and, indeed, what to do with them. chat software, how to set them up about the latest browsers, mail and serious Amiga users. Find out al this month's issue of the magazine for I'm sure we'll see you there...



Too scared of DIY to fit a hard drive? David Taylor may have the answer with

the new drive from Eyetech. here is no doubt that fitting a hard drive is the one of the best moves you could ever make.

You suddenly begin to wonder how on earth you ever put up with all that waiting around for your Amiga to boot up. After all, no other platform is even shipped without a hard drive nowadays. That's not purely down to the hundreds of Mbs of space that their OS's require. Imagine a hard drive based Amiga community and the killer applications that could be written for them.

The next generation of Amigas will, almost certainly, be shipped with a drive fitted (let's just hope it's an acceptable size). No, the days of a floppy based machine are numbered and it's about time. Current Amiga owners have been reticent to buy a hard drive for a number of reasons. Partly because of the price, partly because they are not confident opening their machine up (opening a PC up is de rigeur, but Amiga owners don't like to break that seal), and partly because they don't really appreciate the benefits of a hard drive over floppies.

It must be understood that the amount of work and the speed that you can do, on a hard drive based machine, is so far ahead of a floppy Amiga that there isn't even a comparison. The fact that you can find and retrieve files without searching through stacks of floppies, that you can expand your system using software enhancements -MUI (love it or hate it) and extra libraries and commodities like AShell and MultiCX - means you can make your Amiga feel like a whole new machine. It's like Workbench 4 now Well, almost. A decent system can also use virtual memory and so a hard drive expands your system in more than just one way.

CONVINCED YET?

So, I've convinced you that hard drives are a very good idea, but there are still doubts about the other reasons. Well, as far as price is concerned, you'll be pleased to know that the cost has been dropping consistently over the past year to the stage where a 1.2Gb (that's 1200Mb!) is now available for around £200. Prices may continue to drop but it's really not worth waiting unless you are very strapped for cash, because they aren't going to come down that much more in a hurry.

The only remaining problem then is the difficulty of fitting a drive. 2.5" drives have always been easy to fit, but they cost more than 3.5" drives. 3.5' drives have had a few problems, namely that they require you to "modify", ie cut away at, the case of your Amiga, and that they could consume too much power resulting in you paying again to upgrade your power supply.

This new drive from Eyetech solves all these problems. There is no modification to the case. Simply unscrew the Amiga's case and lift up the keyboard. Make sure that you have taken the anti-static precautions recommended - I can't say I've ever had any problem with static, but Eyetech are proud of their unique antistatic devices. Take out the 2.5" cradle and connect the data ribbon. There is an anti-static cable to be attached and the power lead, which goes onto the

floppy power connector and has a thru-port for the floppy power to be attached to. The drive is secured using industrial strength adhesive pads.

The drive is now ready for action. It takes about five minutes to fit in total and that's if you have a problem unscrewing the case. The drive boots up and operates quickly. It is possible that a hugely expanded A1200 will need a new power supply, but if you've just got an accelerator and an external floppy, you should be fine.

Eyetech have partitioned the drive ready for use and it comes with Workbench and lots of PD utilities preinstalled. This is excellent, because it means Eyetech have done most of the work for you giving you Workbench enhancements that would take you hours to set up. The Workbench menus, vastly extended, give you access to the utilities.

Also installed is MMExperience which is Optonica's excellent multimedia authoring program. So you get all the work done for you and a free commercial program! If there is one complaint, it's that the Workbench partition could have been a little bigger. Still it's not set in stone and if you need to change it later, you can do so - with a

....

....

The drive is ready for you to start working with immediately and you will love it.

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DISTRIBUTOR Eyetech

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SYSTEM REQUIREMENTS A600/A1200

SPEED

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Every aspect has been covered. There are also a series of diagrams but the quality is poor.

ACCESSIBILITY

Provided you're not frightened of wiring a plug then you should have no problems here.

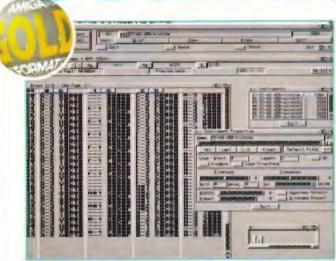
Well thought out partitions and pre-installed software save you lots of work, Some more could have been included.

VALUE

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OctaMED Soundstudio v1



rying to find an Amiga owner who hasn't heard of OctaMED would be like trying to find an open Escom shop these days. OctaMED is the definitive tracking program, and is responsible for thousands of MOD files produced by the talented and nontalented alike.

If there was a problem with trackers it was that they were always tied very closely to the Amiga's hardware. The four channel hardware meant four channels of sound to play with, and that was that. OctaMED however was always one step beyond the hardware, offering eight tracks of sound and MIDI support, whilst rivals were still struggling trying to create a standard Amiga-friendly application.

Now OctaMED the next generation is upon us and, once again, it leap-frogs any competition. Simply put, Soundstudio is the ultimate in tracking

This is the exciting bit - samples are separated from the hardware which makes all sorts of effects possible. The typical tracker display looks familiar: but you can now have up to 64 tracks open in one go. The next generation of sound tracker is upon us, and **John Kennedy** tries not to get too mixed up as he samples its delights.

programs, and offers us a glimpse into the future of electronic music composition as a whole.

FIX IT IN THE MIX

What makes Soundstudio so special is that it is no longer tied to the Amiga audio chipset. An extra software level has been introduced to separate the software samples from the sound hardware. This is software mixing and it allows the Amiga's CPU to process the samples before deciding what to do with them.

Soundstudio allows multiple tracks of samples, and they can be combined in the mixing section where their position in the stereo image can be controlled as well as a degree of echo added. The resultant sample can be replayed using the standard Amiga audio chips, or sent to external hardware such as the Aura. The data can even be streamed direct to disk in 8 or 16-bit formats.

It's like a form of audio raytracing, as the samples are calculated and saved. Creating new sound samples in this way means you can save on precious channels: for example, pre-mix your own percussion loops and squeeze four channels into one. Or create huge tunes to trigger from multimedia programs without worrying about MOD replay utilities. It even makes it possible to create data suitable for direct inclusion onto audio CD's: your compositions need never appear in analogue form before being burnt onto CD.

There is a trade-off for this new mixing power and it's a simple one: the faster your Amiga runs, the better the sound quality. Or, the slower your Amiga, the poorer the quality.

If you want to use the mixer (and it's by no means compulsory) you'll need at least an 68020 in your Amiga: preferably more by means of a Blizzard or similar accelerator card. An Amiga with a good nippy 68030 and 4Mb of fast memory is an ideal system for experimenting with this latest version. You will definitely be able to hear the difference between mixed and nonmixed modules, and the extra flexibility is worth it in many cases. The built-in smoothing process makes a big difference, and when outputting directly to disk you'won't be able to believe your ears.



MUSIC TRACKING

Music trackers are music composition systems which were designed to make the most of the Amiga's internal sound hardware.

The first trackers were four-channel, eight-bit sound but ingenious programming (and some help from external hardware) has pushed the sonic envelope back further than the custom chips designers could ever have imagined.

All trackers work in much the same way: a scrolling list of note values moves from the bottom of the screen to the top. The user can then use the standard keyboard to enter the notes, which are stored in the selected tracks.

These tracks are then organised into blocks to

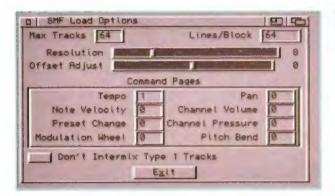
make up the finished song. You'll probably have come across these songs at some time or other: they are called MOD files.

Tracker programs are extremely easy to use, and even relatively non-musical people can compose surprisingly good tunes. In fact, the only person I have ever come across who really cannot make pleasant sounds with OctaMED is AF Editor, Nick Veitch.

Soundstudio is also MIDI compatible, which means that via a suitable hardware interface costing around £20, it can be used with external sound hardware such as drum machines and home keyboards.

REMEMBER THE SEQUENCE

Mixing facilities aside, Soundstudio is still a hard working multi-functional music sequencer. As the demo tunes on the CD-ROM testify, it's possible to create some superb music. Many different instrument types are supported: 8 and 16-bit samples, synthesised sounds, MIDI instruments and all can be mixed and matched as needed. A new slave mode means that linking a second Amiga is an easy way to gain four extra hardware channels. It also means that using a different sequencer on a different piece of hardware to trigger Amiga samples is straightforward.

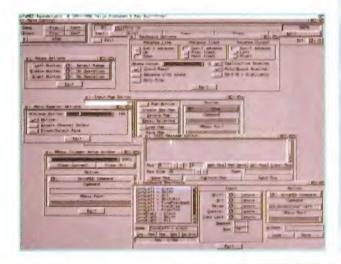


Musicians of the old school will appreciate the notation editor. although by design it's never going to replace a professional notational output system. As the manual states, 'tracker music and traditional score music are hard to reconcile and much would be lost in the process,' The new, improved notation window has been redesigned and now supports a special Compugraphic font for top class printed output.

This CD-ROM is the pinnacle of music creation on the Amiga and it's a must-have for all music fans. As well as containing the program, all the documentation and programming examples the disk is crammed with modules and samples. There's loads here - get it immediately.

Soundstudio will happily deal with MIDI files, and it makes a good, although minimalist, MIDI sequencer.

Enough windows for you? Now you are getting an idea as to the power of Soundstudio. Can be a bit frightening though...



BUYING SOUNDSTUDIO

OctaMED Soundstudio is available on CD-ROM (see the special money off voucher in the news pages of this issue!) and also floppy disk. If you have no choice but to purchase the floppy version and are not simply "upgrading" from version 6 at the lower upgrade price, you will also get a free years membership of the Med User Group.

PLOPPY DISK VERSION WITH PRINTED MANUAL (FOR NEW USERS)...

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NEW FEATURES

- Software mixing of samples before output
- Sound panning and echo/stereo offects
- · Direct to disk recording
- . Up to 64 notes at once
- · Sample length limited only by available memory (samples can be held in Fast memory)
- · Improved support for Aura 16-bit sound module
- More player commands
- More accurate sample loop settings
- · Support for loading S3M and FastTracker 1.0 modules
- Support for Aura, Toccata, Maestro Pro and Delfina

OCTAMED SOUNDSTUDIO V1

DISTRIBUTOR **RBF Software**

PRICE

See Boxout above.

SYSTEM REQUIREMENTS

Any Amiga, 68030 processor or better recommended.

MANUAL

Comprehensive AmigaGuide supplied on CD. Printed version available for additional fee.

ACCESSIBILITY

Music trackers are always fearsome looking beasts and, with multiple windows open, Soundstudio looks like too much to handle

FEATURES

More features than you could shake a large feature stick at, and then some.

VALUE

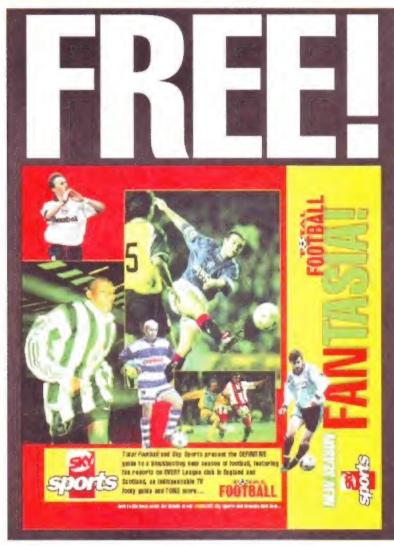
The CD-ROM is great value for money, not only do you get the program but a zillion samples and modules too.

"Definitely the best in Amiga tracking programs. There is and will be no equal."

95%

65

WELCONIE TO A NEW SEASON OF FOOTBALL



Don't miss *Fantasia*, the ESSENTIAL *Total Football* and Sky Sports guide to the 1996/97 season. It's 48 massive, fun-packed pages featuring profiles of EVERY League club in England and Scotland, written by fans for fans. WOW!

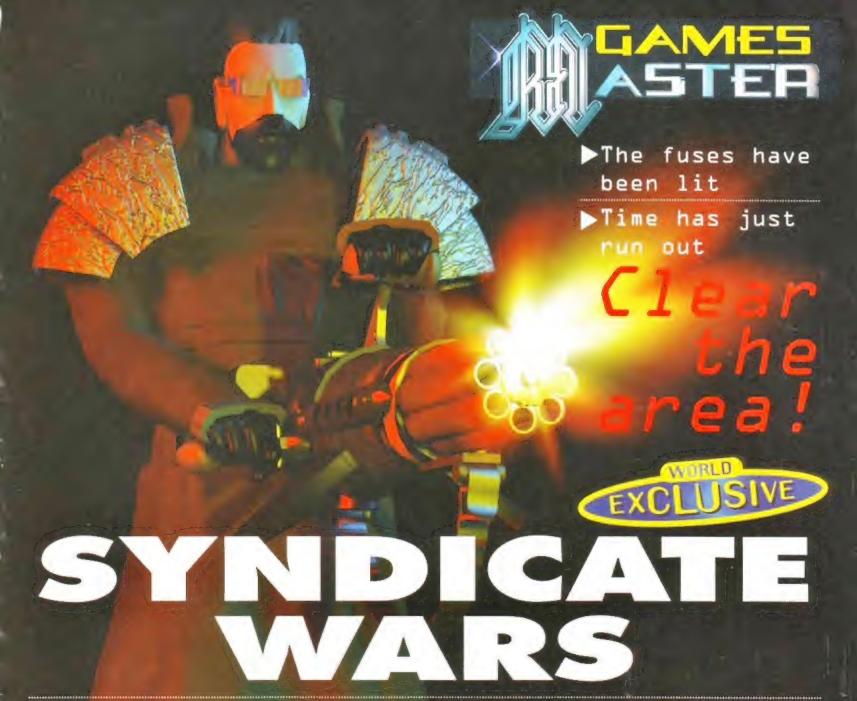
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You sampled the delights of X-DVE 1 with last month's Coverdisk. David Taylor finds out exactly what the new features are in the very latest release.

ntil recently, people who have needed animation on the Amiga have used ClariSSA, A new version of that program is out now and although excellent, it's probably out of the price range of most home. users. X-DVE 2.5 is a program from Italy that now offers an alternative. Like ClariSSA, it offers a new format of high quality animation, so that you can have smooth anims that make the standard format look very poor. Also like ClariSSA, X-DVE is really designed for video enthusiasts because it allows you to create professional title sequences within minutes. (Actually, that last part is not strictly true. It allows you to set up the script for the animation in minutes. but then needs quite a long time to render the sequence.)

The code for the program has been completely re-written and now comes with libraries optimised for different processor speeds. Despite this, even 030 users will have to leave complex sequences rendering for hours.

INDEPENDENT EFFECTS

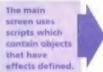
Unlike conventional animations, you don't have to set the position of each part of the animation for each frame. The XDVE system works by using separate objects and assigning movements or effects to each object. These effects are independent of one

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Each object is assigned effects over your choice of

another and can be made at different speeds and started at different points. You decide what frame an animation starts in, with what effect and for how many frames. The last stage is the number of frames required to complete the second effect which is used to remove the object. If you want a background to remain then just keep it in Pause mode.

The effects are obviously not just simple movements of objects as this would be very tedious. There are masses of different effects split into four sections. The simple movement effect is necessary for working with animated objects so that animated brushes can be made to "walk" across the screen. There are also simple effects which split the object into sections in a variety of ways





BE PREPARED FOR THE WAIT

These are frames from a 500 frame, 256 colour animation that took an 030 A1200 36 hours to render. Using very small blocks requires a lot of processor time so a fast Amiga or a lot of patience is required. Reducing colours, frames and using larger blocks reduces the waiting time to minutes.

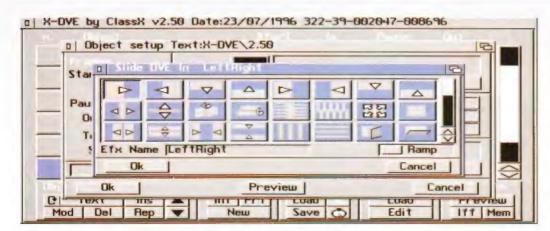


ENHANCEMENTS

- Ability to load the first frame of an animation as a Brush object.
- New MultiBrush object to make X-DVE2 work with image sequences.
- Attributes like 3D, Bevel, Shadow, Outline can be applied to any object before its rendering.
- Object anti-aliasing to eliminate jagged contours.
- Multi-line Text object with programmable spacing and alignment.
- New 40 effects family called "Warp" which act as pre-programmed solid-state DVEs.
- 3 New "Wind" formulae with lots of variations, from a Galaxy-like effect to a spray one.
- Single object or whole animation preview, controlled by a VCR-like control-pad.
- Endless loop (good for spinning logos) or single shot animations.
- Render speed doubled for 3Ds, Warps and light sourced objects.

- 1/16 of degree precision for angle computations (no more jumps with slow 3D rotations).
- Greater compression speed for XFA animations.
- Ability to render and show any frame of the animation.
- Better play speed for XFA animations under OS2.x
- Direct support of picture DataTypes (only under OS3.x)
- Added "Floyd-Steinberg" remap mode for objects.
- Added "StarField" object for the creation of perspective starfields.
- Pause point positioning with the visualisation of the object's shapes.
- Support for the NTSC video standard (60Hz refresh).
- Support of perspective pause point for 3D, Wind, Slide and Warp effects.

- 28 New Slide effects (Bounce, Snake, DoubleSnake, ...).
- Replication function with support of perspective pause point.
- New "Slow" play mode for XFA animations.
- Faster rendering for non-remapped
 AnimBrushes and MultiBrushes, Slide effects and animation and object preview.
- Faster 3D rendering engine for perspective effects.
- Support for 256 colour ColourFonts (useful for Font Machine-generated fonts).
- "No Loop" mode for AnimBrushes and MultiBrushes.
- Editor screen with support of any screen mode.
- "TurnX" and "TurnY" Slide effects with true rotations.
- Croma key support during object positioning. Object positioning also with cursor keys.



and then bring it back together or keep it split apart over a number of frames. The Wind effects, which were also available in version 1, have been extended to include a new set of warp effects. These bring the object in, in a similar way to movement but by warping a side so that it appears to work in three dimensions.

PICKING POINTS

When you work with an object you can decide its start and end positions, where



appropriate, although it won't always be necessary when using effects where the object materialises or disintegrates. You can decide points, including the Pause position where the object will be held, by entering the co-ordinates or by positioning it with the mouse,

When you are in the positioning screen, you can use the keyboard to re-size the object by moving it through the Z axis.

Once you have set an effect, you can view the effect in a preview screen, which has a new interface so that you

have complete control over the frames. For some reason the preview interface responds badly to the mouse click to stop a preview, but you only need to hit the space bar.

If you want to see how the whole animation is coming along, then you can preview the whole thing.

DATATYPES

Objects can be a variety of types. X-DVE can handle simple pictures and text, but can also use animation brushes and, new in this version, starfields for those animated titles in space. Another bonus is the fact that it can handle any file format through datatypes. This does mean that you are reliant on third party programming and sometimes, because datatypes are not commercial, may crash the computer. Datatypes are also a little slow, but I'd still rather have the support for files like this than not at all — a criticism made of ClariSSA, incidentalls.

When using text, you can choose any font and colour and you can now

Continued overleaf ⇒





have multi-line text by using a "\" divider to show a line break. To make the text fit as you want, you can justify left, right or centred. The font support has also been expanded to include the Colourfont type which Font Machine uses (demo on this month's Coverdisk). You can customise the font within the text requestor and this, coupled with the creation power of Font Machine, means you can have amazing looking text doing some stunning things. Linked with the new Loop feature, you can easily create things like flying logos.

BOXES OF TRICKS

X-DVE 2.5 also allows some very neat tricks. In addition to pause point positioning, you can use the mouse to set the rotation of an object so that you can view it in perspective. This is done using the mouse after switching between the two positioning modes. using the tab key. The best trick though, is the use of the new multibrush object, which allows you to select an animation made up of IFF frames by selecting the filename and extension name. This means that you can create an X-DVE animation and save it out as frames and then create a second animation with the first animation played as an object within the second. Animation within animation and all with the click of a mouse!

At first it might seem that keeping track of the different objects and where they fit in the animation might be tricky, especially as there can be up to 100 separate objects and up to 10000 frames. The placement of objects is taken care of by a separate window which shows the objects in graph form. Each section of an object's life is shown in a different colour so that you can easily see where it appears and how many frames it uses for the different stages. Should one be out of sync, you can edit the frame usage of an object from this window which makes management ludicrously easy.

Rendering the animation can be done in a couple of ways. The first is the usual IFF frames, which can be used for a standard Anim format animation and which are rendered to disk. The second is to use the XFA format that was



created for X-DVE. This format produces very smooth animations, but despite its different compression levels, you are likely to run into problems unless you have a lot of RAM, because the animation is created in memory. Unfortunately virtual memory isn't supported so you need a machine with around 10Mbs of RAM for decent sized animations.

When you have rendered an animation, you can use a separate utility to view it so that you've more free RAM. which can also convert animations between formats. This utility is redistributable so that others can use it to view your XFA anims.



EASY TO USE

While the X-DVE interface has been brought more into line with the standard Amiga colour scheme, it has been kept very close to the original in

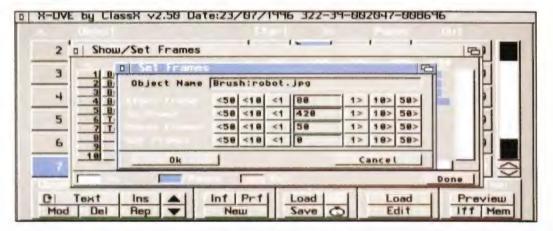
overview of the objects and their placement in the animation. terms of usability. The program is very

The management screen gives you an

intuitive and even if you haven't yet had the chance to use the first version you certainly don't have anything to worry about

All in all, this is a program that is absolutely essential for home video enthusiasts and is even suitable for semi-professionals. It doesn't have the super fast animation format that ClariSSA now has, but it does have masses of features and costs a fraction of the price.

Unfortunately, there is no official UK distributor, but you can upgrade from last month's Coverdisk version for



X-DVE 2.50

DISTRIBUTOR

ClassX

Objects can be

the mouse

section.

placed easily using

Upgrade from AF Coverdisk - 01225 822511

PRICE

£39.99 (Upgrade Price)

SYSTEM REQUIREMENTS

WB 2. WB 3 recommended, fast processor and extra RAM also recommended.

Considering the complexity of the effects it's not

SPEED

MANUAL

Thorough, but sometimes a little confusing.

ACCESSIBILITY

that bad - but it can take time.

A dream to use and you can get up and running immediately.

FEATURES

Sure, there could be more, but you're pretty spoilt for choice.

VALUE

A remarkably sensible price for such a powerful product.

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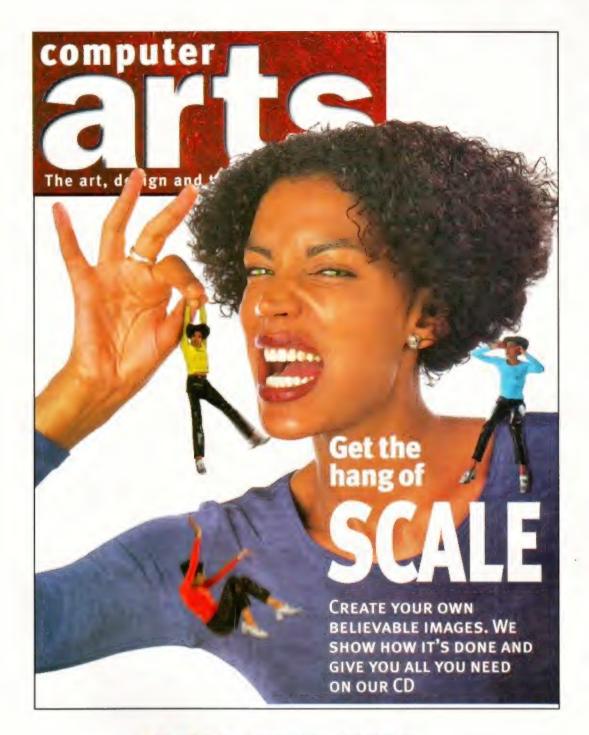
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Life is full of mysteries and the Amiga is certainly no exception. Graeme Sandiford knows all about the guiet strength and willfulness of his favourite machine. So, send your gueries to Workbench, Amiga Format, 30 Monmouth Street, Bath, Avon BA1 2BW.

PC MEMORY

I am writing in desperation to ask for your help and advice with obtaining the best form of PC emulation for the A1200. I have a 120Mb HD A1200 which is fitted with a Blizzard 1230 SOMhz accelerator board and a SOMHz FPU. The machine has 10Mb RAM in total (8Mb Fast and 2Mb chip)I have been using PClask version 3.0 for emulating, which gets me into DOS without difficulty, (I have partitioned my hard drive and allocated 50Mb of it for PCTask).

The problem is that if I try to use a program like Lotus 123 or Supercalc V, the program will only recognise the conventional memory, (which is minimal after the ogramme is loaded), rendering the ication virtually useless. I have both DOS 5.0 and DOS 6.2, but irrespective of what command I try, such as "Emm386", I cannot get the system to use the extended memory.

It seems that all the DOS memory monagement commands require a 386 processor or higher. Due to work commitments it is vital that I do spreadsheet modelling at home in Lotus 123 and it would be criminal if, due to such a basic requirement, I had to follow the masses and switch to a PC.

Please advise on how I can overcome this problem and if there is any way of employing a more powerful hardware emulator for the A1200, like the KCS PowerBoard for the A500 or emplant for the A4000.

W.R. Charles

According to the PC Task manual, you should be able to use the extended memory manager HIMEM.SYS, included as part of MSDOS. You need to add a line like this: DEVICE:

CADOSVIIMEM.SYS to your CONFIG.5YS file. As the name suggests, EMM386 is only for 386 processors and above, whereas PCTask 3 recommends experimenting with shareware and public domain utilities such as EMS40.5YS which should be available from FD libraries. bulletin boards or the internet. The next version of PC Task (version 4) is said to emulate higher members of the Intel family, which ould improve matters somewhat and would well worth huying. Wizard Developments distributing PC Task in the UK and have an grade program, so give them a ring.

used emulation systems for the Amiga. The



A500 GOODIES

I have an A500 fitted with 4Mb RAM. I have a 49Mb GVP Impact series 2 A500-HD+ hard drive with a Supra Turbo accelerator fitted. I am running Workbench 2.05 and Kickstart 37,175. Now to a few questions I'd like to ask.





TOP: Will a Supra Turbo accelerator make it possible to run programs like Gloom Deluxe on an A500?

RIGHT: Your best bet is to upgrade if you want to play with this chap.

1. Will the accelerator I have make it possible to run programs like Gloom Deluxe, or does it make A500-compatible programs run faster? If I was to upgrade my accelerator, what would be the best one to get without going over the top on price?

2. I am thinking of buying a CD-ROM drive. What would I need to buy to make one fit my computer? Also, could I use a PC CD-ROM drive, or does it have to be an Amiga CD-ROM drive? Is there a lot of software that will run on my machine, or is most of it solely for use with A1200 machines?

3. When I try to load some of the programs I have, I get a message on screen saying: "Unable to open multiview". Why is this and what can I do to make them open?

I would like to thank you for an interesting magazine, although you could do a few more articles for the A500 users, since not all of us can afford to upgrade to an A1200.

Also, have you ever thought about having an "articles for sale" section in your magazine -

Continued overleaf ⇒

WORKBENCH - HINTS, TIP

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PRINTER PROBLEMS

I have recently brought a second-hand Amiga 500+. I am new to computers and, although I'm thrilled to bits with it, I would like a printer compatible with the A500+. I have been to several shops who have given me conflicting information. I am looking into the possibility (and price!) of black'n'white or colour.

For instance, the cheapest colour printer, (Citizen ABC), at £149 appears on the surface to be good value, but would it be compatible? Or would it be advisable to consider a second-hand printer? At the moment I only use the computer for fun and letters to friends (if I could print them!). I feel that at the huge age of 37 (and being female !), that I am a total amateur on the subject of computers. Although I use a computer at work, I am a very small cog in a huge machine.

Mrs. L. Mackenzie

First of all, being female has nothing to do with getting a printer connected to your Amiga. Nor has being 37. The big problem, as you hav discovered, is a lack of sensible advice. In theory at least, you should have no problems using a printer with the Amiga and the Citizen printer is good value. You should be able to get it up and running straight away

Getting the most from the features of the particular printer you finally decide on depends on how well the software you have can cope. Some software, for example Wordworth and Final Writer, will come with printer drivers which can work with practically anything

However, your A500+ may be lacking the necessary expansions to use these packages. You may find you are using the default printer drivers and so the results (especially when printing colour images) may be disappointing. Black and white text should be fine, but detailed colour images may be poor. In this case, it's possible to buy dedicated printer management programs, such as TurboPrint which will make a

big difference.

Finally, I wouldn't recommend buying a second-hand printer. It's easy to end up with something you can't use. Both a manual and a warranty are very useful to have.



I think this would be very helpful to all Amiga owners?

> A. Rae Surrey



Ask yourself whether you really need an eight-speed CD drive before splashing out your hard-earned cash.

1. No, the accelerator only speeds up the computer slightly. It does not increase the amount of Chip RAM available, nor does it upgrade the graphics chipset to full AGA compatibility (something which is physically impossible anyway). Both would be required to run Gloom. Since "going over the top" is not something which is possible to do on an A500 these days, my advice would be to stop spending money on the A500 and buy an A1200 as soon as possible.

2. Since the GVP hard drive has an external SCSI port, any single- or double-speed SCSI CD-ROM drive mechanism will be suitable. You will need an enclosure and power supply, but a little shopping around should sort you out for under £100.

3. It sounds as though some images, sound samples, or other IFF files are trying to load and run the utility Multiview, but are unable to locate it. They can't locate it because it's part of Workbench 3, not 2. It's a utility which will display images, play sound samples and read AmigaGuide documents using its Datatypes. You won't have a Datatypes either.

I think this answer neatly deals with your last point too. If you don't upgrade, you miss out.

HOW FAST A CD?

I intend to buy a CD-ROM drive in the very near future to replace any existing set-up of a networked A1200 and CD32. I am interested in the IDE drives from Siren, but my dilemma is: Which speed of drive should I go for?

The question that I would like to ask you is, what is the highest speed of drive that the IDE interface will match? I have a JTS 850Mb HD already connected to the IDE interface, a Blizzard 1230 and 4Mb Fast RAM. I understand that I can still fit an IDE CD-ROM drive and it will not interfere with either of these extras.

The JTS is a very fast HD and I would like to read and transfer files at the highest possible rate. I believe that this all depends on the speed of the interface - can the IDE interface keep up with an eight-speed CD-ROM drive? Or would it be more compatible with a quad- or six-speed CD-ROM drive.

> P. Casson Bristol

An eight-speed CD-ROM drive will work at approximately 1Mb/second and it's very likely that your hard drive works at least at this speed. It's therefore not a problem to use an eight-speed drive.

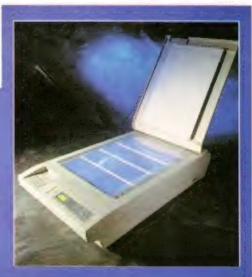
However, ask yourself if you really need this speed: I have a quad-speed CD-ROM drive in my Amiga and it's more than enough.

SHARED SCANNER

I am looking for a flatbed scanner which will work with both my Amiga 1200 and my brother's PC. In several PC magazines, I have seen the Epson GT-5000 parallel version advertised for £299 + VAT, including software for the PC. If I get the Powerscanner software will this work with my Amiga 1200? Also, what is the difference between the GT-5000 and the GT-x 5000?

> Andrew Parker Cheshire

Yes, as long as you get the Amiga Powerscanner software, the scanner will work with both the Amiga and the PC. As I understand it, the GFx has a smaller footprint and is faster at scanning (not really an issue when using the parallel port to transfer data). You should note that as long as one computer is connected to the scanner, images can be saved to floppy disk and transferred in that saved to floppy disk and transferred in that way; if you use JPEG compression, all but the largest images can be shared in this way.



FLAKEY A1200

I own an A1200 that is three years old and I am having an extremely annoying problem with it. As soon as I turn on the power, the computer turns on and after a second or two it resets itself several times. After a few attempts, I finally get the disk to load the request screen. I then insert a disk, and some time later, the computer will again reset itself. This time can vary from a few seconds, up to 10 minutes.

This problem occurred earlier this year, but I didn't know what to do about it, so I left the computer where it was and unplugged it. However, last week I thought I'd give it another try. The machine worked perfectly for a day or two, but after that it went back to its old self and started resetting itself again. My Amiga is plugged into an extension cable and I thought it might be this that is causing the problem. However, after several trial-and-error tests I found that this was not the cause.

> Graeme Kettles **Scotland**

It's very unlikely that an extension cable could cause this problem, unless it was very old and contained some loose wires; in which case it is a fire risk and should be disposed off immediately. There are three possible faults which I can think of.

First of all, check that the computer isn't crashing at the same time as some other electrical appliance in the house is switched on or off. This includes washing machines, central heating and even fluorescent tube lights.

It could be that these are causing "mains



spikes". You can check for these with a mains noise monitor (about £20 from a good electrical or electronics shop). You can buy a mains filter for about £20 which should stop these spikes from crashing your Amiga.

Alternatively, the power supply could be on its last legs and in need of repair. The easiest way to check is to swap it with a friend's PSU for a while and see what happens. Make sure you press the power supply plug all the way home into the socket on the Amiga.

Finally, there could be a problem with the computer itself. A chip or wire could have worked loose and needs to be pressed home.

Or there could be a more serious problem which requires repair or replacement. In this case, you'll need the services of a professional.

IF YOU HAVE A QUERY...

re don't just concentrate on our areas of ertise - we take on all your problems (as long an Amiga is involved). re are a few tips on sending in questions:



Detail the problem as best as you can. that caused the Give full details of your equipment. wouldn't be more easily solved by contacting the dealer from whom you bought the goods.

WORKBENCH

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OCTOBER 199

Bear these points in mind and fill in, photocopy,

or copy the form below as best you can. Send your letters to Workbench, Amiga Format. 30 Monmouth Street, Bath, Avon BA1 2BW. Your Amiga: Kickstart version: Workbench revision: Total memory fitted Chip memory available A500 A500 Plus ○ A600 A1000 O A1200 O A1500 A2000 O A4000 O00EA 0 1.2 0 1.3 O 2.x ○ 3.x Extra drive #1 (3.5in/5.25in) as DF: manufacturer: O 1.2 0 1.3 0 1.3.2 2.04/2.05 021 ○ 3.0 Extra drive #2 (3.5in/5.25in) as DF: manufacturer: Hard disk: Mb as DH Manufacturer: Extra RAM fitted - type, size (Mb) and manufacturer: Datails of other hardware:

TO VMM OR NOT TO VMM?

I have acquired a Viper accelerator with 2Mb Fast RAM for the last two years. The system has been working great, although it was short of memory from time to time. To compensate, I made use of the MMU to run VMM.

The problem only started since I took the 2Mb SIMMS and replaced it with 8Mb. The system accepted the extra memory after I reconfigured the jumpers, but the MMU ceased to function. I checked with SysInfo, which read "all in order" apart from the disabled MMU.

I took the 8Mb SIMM out and replaced it. with the 2Mb to test if the SIMM was causing the problem. Nothing changed. I've been earthing myself before changing the SIMMS, so I couldn't have damaged anything. I couldn't see any switches or jumpers on the accelerator that I might have tampered with by accident.

The only thing I did after installing the 8Mb SIMMS was running ReMapKS to copy the ROM into the RAM on start-up to speed up the OS operations. Could that be the problem? When I run a memcheck on the system it gave me an error message of byte size fail, memory fail at location 00600000.

> C. Chan Coventry

There is no way that ReMapKS would have written anything to any EPROM on the Viper board. In fact, it's unlikely there is any chip on any commercially available accelerator which can be re-programmed. The problem is caused by ReMapKS.

In order to reposition the Operating System ROM

into Fast RAM, and therefore speed things up a little, it is necessary to constantly remap any jumps and calls to the OS routines - after all, the memory tocation will have completely changed. In order to perform this remapping, the MMU is usually used (sometimes custom logic on the card is used) and the MMU can only be used to run one task at a time. As a result, the VMM utility will no longer function. I'm afraid you will have to choose between OS remapping and the virtual memory: you can't have both at once,

C64 EMULATION

I have just read a letter where a reader wanted to connect C=64 drives to his Amiga and transfer files. Sadly, Graeme couldn't help him. This, and more, is possible with the complete A64 package V3.0 from Questronix. I bought this through Reuben at P.D. Soft (a very helpful guy) and recommend it highly as an emulator and interface to C=64 peripherals. If Reuben can't help you, try: Questronix, PO Box 340265, Hartford, CT 061-0265, USA. Tel: 203 296-6037.

P.S. Keep the Amiga flag flying! (And bring back Pat MacDonald!)

P.P.S. Why do A500 users still whinge about coverdisks? My A500 can handle everything my A1200 can, except AGA.

> Mike Denman Dorset

Thanks for the helpful suggestion. It's only because it was so comprehensive that you can get away with your first P.S. message. As for your second, of course your A500 can handle everything but AGA. Isn't that the entire point though?

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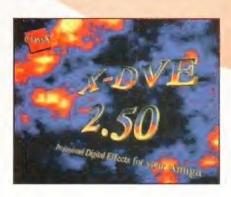
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Sites Worth Seeing...

Darren Irvine takes his regular monthly look at some of the Net's newest Amiga resources, and offers some completely reasonable and unbiased comments on the online Amiga world.



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Richmond Sound Design's Midi control systems will be of interest to you if you are involved in theatre or concert production.

TAKING CONTROL

As usual this month lots of new Amiga related stuff has appeared on the Web. Amongst the usual "Kewl" homepages and software sites, I've noticed a few pages belonging to companies that are producing actual real-world Amigabased products.

One such company is Richmond Sound Design who utilise the Amiga as part of their "MIDI Show Control/Stage Manager" system. This is a system which is aimed at theatre managers and can control fighting consoles, audio consoles, maybe a sampler or two and various other bits and pieces such as effects units and tape decks.

It can also be used in conjunction with automated scenery movement systems and pyrotechnics - in short, a system that can be used to control all aspects of theatre production. The Stage Manager 1200 system includes an A1200, colour monitor and 12 output MIDI interface, and the Stage Manager 4000 has an A4000, also available in an industrial rack mount version.

If you would like to find out more about this system then check out Richmond's home page at:

http://www.show-control.com/

LASER STARS WEB SITE CONSTRUCTION DETAILS

If you are interested in designing your own Web pages using your Amiga then the Laser Stars site should be of interest. The pages at Stars site should be of interest. The pages at this site have been designed on an Amiga, and they contain lots of relevant information for the budding Web page designer. From an initial guide to what hardware and software that you will need to get started, through to a discussion of different image formats (such as Interleaved GIFS).

Laser Stars goes on to consider slightly more exoteric aspects of Web page design such

more esoteric aspects of Web page design such

as math typesetting and image processing. There are also tips on how to choose a mere are also tips on how to choose a background for your pages, and how you can use an image processing program to (for example) minimise the contrast of the background picture so that foreground text is highly readable.

highly readable.

There is also a brief comparison of the features of the various Amiga Web browsers.
Laser Stars' URL is:

http://www.achilles.net/-jtalbot/
blo/amiga.html



WIRENET AMIGA INTERNET

A new Internet Service Provider (ISP) called Wirenet Amiga Internet (WAI) has been set up to provide access and support for Amiga users, not as a sideline to other platforms, or with poorly supported, out of date software, but with the

supported, out of date software, but with the latest and most powerful Amiga Internet software. Wirenet's own access is provided via U-Net so their connection should be fast.

WAI intend to supply a comprehensive suite of software, including an integrated news and mail package, a GUI based ftp program for downloading software and other files, and the latest World Wide Web browser. A castom insteller will be used to configure the various software packages to your system, with a minimum of input from the user, with telephone support provided in the event of any problems. If you don't yet have access to the net, or are thinking of changing ISPs, then WAI might be for

you - they intend to have local call access throughout most of the mainland UK and Northern Ireland. The URL you need for more information is:

http://www.u-net.com/-wirenet/



Virenet Amiga internet are an interesting new 5P catering specifically for Amiga users, if you

Another company producing an Amiga based hardware and software system aimed at the performance market is Geodesic Designs, Inc. Their "mindEYE" system is a package for the creation of real time video light shows. The hardware takes sound from the built-in microphone or from a stereo mini-plug and feeds it to the software through the second mouse port. The software creates a light show that moves to the music. The list price is \$595.00 which is pretty steep, but if it's the sort of thing you are interested in, it might be worth contacting Geodesic for more information, and there is also a downloadable demo version available from their web site.

Geodesic claim to be the people who "...made the MindLight back in the 80's, although, it's hard to remember that far back!" They are certainly right in my case, as I don't remember it. The URL of Geodesic's homepage is:

http://www.pair.com/geodesic/me /mindeye.htm or you can reach them by e-mail at:

BUILT IN AMIGA

geodesic@geod.com

Visualcom is a Dutch company that aims its products at providing an "In-store communication system". At first this doesn't sound like it might be of much interest, but

DEJA VU

So yet another company involved with the production of the Amiga has bitten the dust. As you probably know by now, Escom UK's 1000 employees received the disturbing news that the company would have to shut down after no buyers were found for the operation.

Although receivers for the company have stated that discussions can still continue with potential investors, the high costs of continuing the operation have forced the shutdown.

In the nick of time as it were, Escom's sale of Amiga Technologies to Viscorp was finalised on July 18th, and Viscorp takes complete control of all Amiga-based assets on the 19th of August.

when you learn that its latest product is basically a television monitor with a built-in Amiga 1200, then it becomes interesting purely for curiosity value at least.

If you would like to find out more, check out Visualcom's home pages at the following URL:

http://www.luna.nl/~visual

AMIGA SUPPORTS THE 1996 OLYMPIC GAMES

Several US-based Amiga companies have joined forces to provide computer support to the press agencies attending the Games.

A series of high-end Amigas are being placed at the heart of the media editing room for use as an on-site editing tool for video footage taken by various reporters and media producers.

The Amiga will be getting some positive media coverage and also a chance to demonstrate its prowess handling complex broadcast and video graphics.

DOWNLOADABLE GIZMO OF THE MONTH

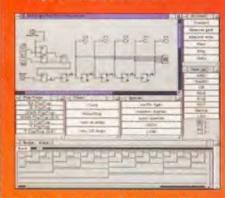
In the first of a new irregular Amiga.net feature, I've decided to give a mention to a piece of software that is freely downloadable from the Net, which I have found either amusing, useful, or just plain

This month pride of place goes to little program that can be used to simu digital logic circuits, and uses a full graphic

digital logic circuits, and uses a run graphic user interface to design and edit the circuits. You can add most logic circuits to your design, including an unlimited number of gates (AND, OR, NAND etc), various flip-flops and a user-definable clock. The program also features a 7-segment LED display simulator, and an oscilloscope display for displaying the logic function of your circuit.

If you're interested in logic circuit esign, or you would just like to find out about it (the program has excellent help you. The URL to head for if you are

http://www.sax.de/%7Eatetzl/





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LEFT: Also of interest to performers and production people might be Geodesic's MindEYE system.



ABOVE: Visualcom are a Dutch company making interesting use of Amiga A1200s in their hardware systems.

Making the difference http://www.futurenet.co.uk





















It's phenomenally popular – in fact it's one of Europe's most popular web sites. Not only can you view the homepage of your favourite magazine, browse through back issues and follow links to homepages of Amiga developers, but there are also regular news updates from around the Amiga scene as well as a daily world news service. Try it now!

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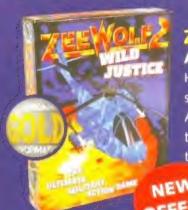
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Organiser 2 is the latest release of Digita's award-winning software. We gave it a stonking 92% in the February issue and gave you a time limited working version to sample on the coverdisk.

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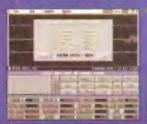
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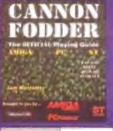
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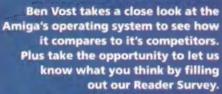
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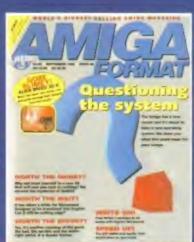
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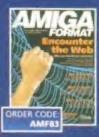
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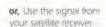
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software that you have purchased for your Amiga.

So, if there are any areas that you would like to see covered then please do not hesitate to let us know. Send any ideas that you do have to: Amiga Format, Tutorials, 30 Monmouth Street, Bath, BA1 28W.

TUTORIALS

90 INTRODUCTION TO THE INTERNET
Once you've got your machine connected up to the Internet, chosen a browser and sent a few emails you'll be wondering what else you need. This month Darren Irvine trawls through some of the other Internet-related software available.

92 OCTAMED TUTORIAL

There are plenty of little tricks in OctaMED which help to make your music more interesting. Darren Irvine looks at the Echo utility and the Sample Offset command.

94 REAL 3D2

The second version of Real 3D saw the introduction of support for b-spline tools and b-spline patches. They might sound complicated but Graeme Sandiford is here to guide you through.

6 BLITZ TUTORIAL

John Kennedy adds some new features to his browser program.



TUTORIAL

Soft Options

This month, Darren Irvine takes a look at some of the other Internet-related software that you might want to use on your Amiga.



he tutorials so far in this series have shown you how to actually get your Amiga connected to the net, how to set up the basic Web browser AMosaic, and taken a look at the various options available in terms of email software for the Amiga.

Although these systems cover the basics of Internet access, there are other types of software that you will want to run, and this month we'll take a look at a few of the options.

NEWSREADERS

Although the choice of newsreaders for accessing Usenet newsgroups is not quite as wide as that available for email systems, there are still a number to choose from. If you have already gone to the trouble of installing *Thor* on your Amiga for email, then it makes sense to go the whole hog and set it up for Usenet news as well (and Fidonet if you are using that too).

There are a number of alternatives, however, Two that I have used extensively, and had few problems with are *Tin* and *GRn* – actually programs at the opposite ends of the approach to reading news.

Tin is a Unix ported program'with a very similar look and feel to the Elm mail system. It runs in a strange text only mode in a CLI window, and was

GRn allows an Amiga-like method of subscribing and unsubscribing to the many Usenet newsgroups. the newsreader originally supplied by ISPs such as Demon who provided any sort of Amiga support at all.

For all its 70s look and feel, *Tin* works surprisingly well, and if you can get over its lack of support for anything fancy, then it's a perfectly competent newsreader.

GRn, on the other hand, is derived from the term Gadtools Reads News, and as you might expect from such nomenclature, is an Amiga GUI-based system. GRn is instinctively much friendlier to use than Tin, but it is occasionally prone to crashing if your system isn't set up 100% correctly in terms of the various assignments required for accessing your ISP's news host.

Again, there are more choices available and sometimes the best thing to do is to ask someone else you know who is already using an Amiga newsreader what they think – if they are anything like myself they will have installed two or three before settling on the one they are currently using, and will, henceforth, have ironed out any



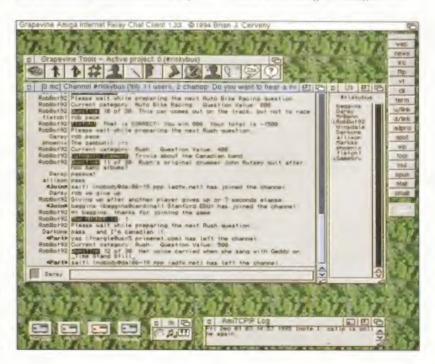
Aweb is a big improvement over AMosaic.
Only time will tell however if it turns out to
be the ultimate Amiga browser.

operating wrinkles in their system - you may as well pick their brains and avoid the same headaches yourself.

IRC

IRC is basically a real-time conferencing system, allowing Internet users all over the world to meet in discussion areas known as "channels", and hold a conversation amongst themselves as if they were all in the same room, rather than connected to diverse computer systems anywhere on the planet.

IRC uses a client-server model of operation, where individual users run "client" software on their computers, which communicates with an IRC "server" program running on a system anywhere on the net. The servers handle the routing of messages from



Grapevine is an extremely simple to install and use IRC client, allowing control of most of the standard IRC commands from its button bar.



GETTING HOLD OF THE SOFTWARE

AmiNet is the place to look for Internet and comms related software that doesn't have its own specific homepage. Tin, GRn, Grapevine, and AmiSlate can be found on AmiNet. Use one of the following sites:

> ftp.wustl.edu /systems/amiga/aminet/comm/tcp ftp.uni-paderborn.de /pub/aminet/comm/tcp ftp.doc.ic.ac.uk/pub/aminet/comm/tcp

For AmIRC, check out its own homepage at: http://www.vapor.com/support/amirc

one client to another.

There are currently two main choices when it comes to deciding on an Amiga IRC client - the well established Grapevine, and the new upstart AmIRC. Both of these are excellent programs, but perhaps AmIRC might be said to have the edge over its rival for the sheer amount of features.

That said, unlike Grapevine, AmIRC requires MUI, a fact that will be enough to put some people off. Additionally, a new release of Grapevine is expected imminently, and when it arrives, it will really be a matter of downloading both

RIGHT: AmiSlate allows real time graphical communication across the Net. If like me, your drawing skills aren't up to much, you can import graphics files

and add plain text.

programs and seeing which one that you prefer.

Although both AmIRC and Grapevine have their own specialised way of performing most of the standard IRC commands, both will also let you use the old-fashioned command line instructions for controlling your IRC session, and in some ways doing so for a while can lead to a greater understanding of the way in which IRC functions.

AMISLATE

IRC is a great chatting mechanism in a situation where there are many people chatting to a group of people but it is somewhat limited in a one to one manner. Sometimes it can be useful to be able to transmit ideas graphically rather than in text form and this is where AmiSlate comes in.

AmiState is a "Whiteboard" system. In effect what this means is that you can use AmiSlate to contact any other AmiSlate-running Internet user and the program generates a shared "whiteboard" - a reasonably competent "paint" style window to you and me.

When you select a colour and draw a line or drag out a box, then exactly the same pattern that forms on your screen forms at the other end,

Now that you have seen what kind of software is available for use on the Internet, there are still lots more things to learn - for example, how to get the most from aspects of the net like IRC or web search engines.

You may also want to think about getting into designing your own web pages and all of these things can be accomplished fairly easily using your Amiga on the net.

JARGON

A piece of software used to navigate the World Wide Web by displaying the Hypertext pages and allowing the user to select any of the links displayed. The definitive Amiga browser was AMosaic. but there are a number of others available now on the Net which are better - you can use the experience you had installing AMosaic to try out some of the following: IBrowse, Voyager, or AWeb - all have easy to find homepages on the Web - use a search engine such as the one at http://www.yahoo.com to find them.

Internet Relay Chat - the Internet's realtime multiperson chat system.

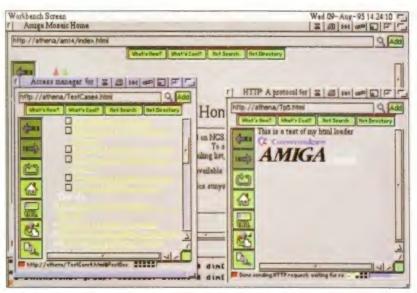
Internet Service Provider. A company such as Demon Internet or Atlas who basically sell access to the Internet. They have host machines that are on the net full time to which you dial in using a modem to connect to the Internet

when you want. There is a new Amiga-specific ISP called WAI ~ see this month's Amiga.Net for details.

Serial Line Internet Protocol. One of the two main protocols for accessing the Internet over a telephone connection. The other is PPP - Point to Point Protocol.

Transmission Control Protocol/Internet Protocol. The basic mechanism by which all data is passed across the internet. Also the name given to the sort of software required to get your computer onto the Internet.

This is the news system carried on the Internet (purists will tell you that Usenet is not PART of the Internet, but for all intents and purposes it may as well be). There are literally thousands of groups dealing with everything from fans of aardvarks to Amiga networking.



ABOVE: Ibrowse was developed by the same team of people who brought us the seminal AMosaic. In many ways it shares a similar feel to the original but in this latest version you will find that HTML support has been greatly improved.

Octa/M Tutorial

Darren Irvine takes a look at a few of the techniques that you can use to get that little bit more out of OctaMED V5.

ow that you've got to grips with the basics of song construction using OctaMED, it's time to look at a few special tricks that can be used to get the most from the program.

IS THERE AN ECHO

One of the easiest techniques that you can use to instantly make a track stand out is to use *OctaMED*'s Echo utility. This works best on short samples such as bass notes or acid style riffs. Highlight a range of notes that you want to echo – usually the entire track.

Select "Note Echo" from the "Edit" menu or use Amiga+E. You will be prompted for an echo distance and a minimum note volume. The first of these is the time delay between subsequent echoes. A good technique to remember here is that if your track mostly has notes that are, say, two or four spaces apart, then select an echo distance of three. If the track is mostly spaced three apart already, try an echo distance of four. Selecting echo distances in this way works best to make the track "fill out". The minimum note volume is the volume at which the echo will stop - for most natural sounding effects, use one as the minimum. When you are happy with your selection, click on "Do Echo" - you will instantly see the echoed notes appear in the track. Play the track now to see what a difference the echo has made. You will see how using the echo feature has added a control into columns two and three of the datablock - in this case the C command.

THE 19 COMMAND

If you have a sample that has a dynamic timbre, such as an analogue synth filter sweep sound, you can use the Sample Offset command – number 19 – to really make a track stand out. As the name suggests, this command effects the point from which a sample begins to play. What this means in practice is that you can use it as a sort of filter-cut off value – almost as if you were controlling a synth. This is because if you start your filter-sweep sample at

✓ Edi	t SF	oace	Chord	010	n/Off	0 1
000	<u> </u>	000	99	_	999	ØØ
9994	<u>1</u>	000	99 99	-	999	ØØ
995	===	000	88	_	999	00
888	D# 1		88		888	_
819	F-1	999	99	=	999	88
813	D## 1	000	99	_	999	ØØ

A relatively simple bassline created in a single track - not very interesting really.

✓ Edi	t SF	ace Chord	On/Off
011	D# 1	10000	
Ø 13	F-1	90000	- 00000
0 15		00032	- 00000
819	D# 1	10016	
019	C-1	00C16	
829	D## 1	10000	
823	===	000000	
823	F-1	10032	- 00000

The same bassline after a bit of echo has been added - note the 'C' command and associated data values (in this case volumes) - making it much more interesting.

JARGON

Here's a quick refresher on some of the terms used throughout OctaMED.

SAMPLE

The Amiga's internal sound system operates by playing back long strings of numbers which are a digitised representation of a sound - these strings are known as "samples".

RACK

This is the basic unit of a song composed on OctaMed (hence the descriptor – "tracker").

BLOCK

A block is a group of up to 64 tracks played concurrently.

SONG

A song is basically a number of blocks strung together. A song need not be composed entirely of separate blocks.

HODULE

MIND

Musical Instrument Digital Interface. A standard set in the 80s which allows musical instruments to communicate with one another and with computers. different points, you will have caught it at different values of the filter in the original sound. Sounds confusing? It needn't be – once you try the 19 command out for yourself all should become apparent.

To get started, create your original track using an appropriate sample.

Next – go down each step in the track and manually type in "19" in columns two and three of the datablock, beside the sample number itself. The easiest way to do this (note that you must be in Edit mode here) is to go to column two, and hold down the "1" key until the whole track has been covered. Do the same holding down the "9" key in column three.

The last two columns are used to enter the Offset value used by the 19 command – this value is in Hex, and each hex unit equates to an offset of 256 bytes from the start of the original sample. To get a classic acid style filter sweep, start with an offset of zero, work up to a value (which will depend on the length of the original sample) and then back down to zero again. Note that if you try this and find that you can't hear anything, chances are that you have set too high an offset value, actually past the end of the sample.

PITCH SLIDING

Another useful and easy to use feature that makes your tracks stand out is to pitch slide one note to another. What this does is add the appropriate amount of pitch shift in the space between two notes for the first note to appear to slide up or down to meet the pitch of the second note. You can enter pitch slides manually - there are two types, with control numbers one and three respectively - but it gives more meaningful results to use the "Pitch Slide" option from the "Edit" menu instead. Note that Pitch Slide is a command that is most effective when used sparingly - too much and the effect is spoiled by the fact that your

OctaMED			.00f - So	ng: <uni< th=""><th>aned></th><th></th><th></th><th>42</th></uni<>	aned>			42
Play Son			01 3 \$ 19 [TALCIAL
	ck Con					Edit Samp	le Edit	SynthS
D	STOP		98:88 R				85	CINRH
Sg 81/81	< > Sc	881/881	Sg 881/8	24 B 00	6/812:			@ 12
V Edit	Sp.	ace	Chord D	On/Off				> Set Cir
999	0-3	H138	0	999	OOF-3	E 9 9	99	99999
	0-2	H190	2	999	ÖÖF-3	Ğĕĕ	88	99999
004	8-3	H198	3	888	00F-3	POO	88	88888
885	2-3	H138	2===	999	00F-2	COO	ğğ	99999
10:10:2		11 3 4	7	-000	O DE MA	13.00.00	00	000000
998	8-2	H198	8	888	00F#3		88	22222
010	E-3	H128	B	999	00	000	00	99999
811	-5	H 1 5 8	2	888	00F#4	Bøø	00	88888
813	2-3	H138	P	888	995#4	BAS	88	88888
Chip	: 88816	88976 Fa	st: 88823	47264	- Stopp	ed -	Freeze	Display
-								

Use of the '19' command in all its glory - add a bit of percussion and you're halfway there.

track will sound as if it has been recorded onto a dodgy tape.

REVERSING SAMPLES

You can make existing samples go further by editing them – either by cutting and pasting sections of the sample around or by reversing part or all of the sample. A good idea here is to load two versions of the same sample and keep one original whilst editing the other. Then you can use the un-edited sample for most of your song, and the edited one as part of a break, or when moving from one section of the song to another. Partially reversing a sample works best on samples such as breakbeats and longish vocal samples.

Reversing a sample is easy – just click on edit sample when you've selected the appropriate sample. Drag with the mouse to highlight the part of the sample that you are interested in (it might be the entire sample) and click on "Reverse", then play the sample to see what it sounds like, and click on "Reverse" again to return to normal if you don't like the change.

The features mentioned here are only a small subset of what you can actually do using OctaMED – only using it extensively for yourself will teach you all the tricks. OctaMED can also be used to control external sound devices via MIDI, and we'll be covering that at a later date.

COMMONLY USED KEYS

ARROW KEYS: moves the edit cursor around the block, and from track to track.

SHIFTED ARROW KEYS: up and down shift through the available blocks, and left and right select samples.

ESCAPE: toggles edit mode on and off.

SPACE: stops a song, block or sample while it's

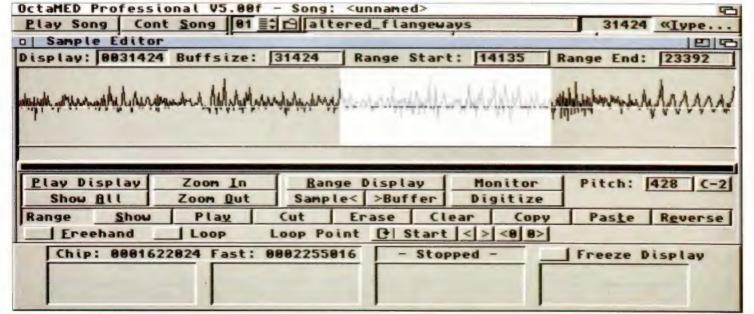
playing.

F KEYS: change currently selected octave.

APOSTROPHE: toggles double line spacing.

DELETE: removes the current entry beneath the

NUMERIC KEYPAD: toggles individual tracks on



Editing samples couldn't be easier - just highlight the relevant section and cut, copy, or in this case reverse.

Real 3D organic surfaces. Graeme Sandiford show you how to use them to

Spline tools are ideal for creating smooth and organic surfaces.

Graeme Sandiford shows create this beautiful rose.

elcome to another tutorial on the stunningly powerful and infinitely complex Real 3D2. One of the most important and powerful features, added in version 2 of Real 3D, is support for besplines and b-spline patches (also referred to as meshes).

Don't worry, although they sound complicated they're actually quite soft and accommodating. B-splines are great modelling and animating tools as they are not based on polygons. This means that they are not constructed from straight lines, but are based on mathematically defined curves.

This makes them great for creating smooth and organic surfaces as well as smooth animation paths. Other applications include advanced texture-mapping and shrink wrapping, but we're going to be concentrating on some basic modelling. We'll be trying to create a flower in this tutorial and making use of the "squishiness" of spline patches and their organic curvature.



Once you're happy with the shape, press your right mouse button. Click on the icon labelled Free and from the new icons click on the one with two lines and a down arrow (to the left of mouse-pointer) or use the menu Modify/Freeform/Reparametrize.



First off, make sure your working environment has at least one top view. If you don't, you can simply change a view window to a top view by pressing <right-amiga><3>. Next go to the tool window and click on the icon labelled Ctrl.



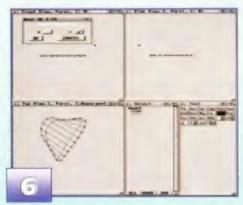
This will bring up a new set of icons, the one you need to select is a closed line that looks like a puddle. It can also be accessed from the menu Create/Control/B-spline Closed. Go to your top view and draw a petal shape



This will have doubled your points so that they are of an even number. However they are still untidy (important later on). To fix this click on the icon with three knots evenly spaced on an arch or on the menu Modify/Freeform/Distribute.



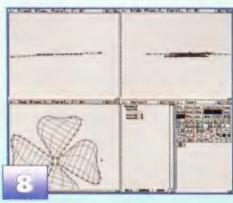
This will spread out the knots evenly which is important, as with the Reparametrize function. because the knots will be used to create the patch for the petal. Do this by selecting the menu Create/Freeform/Skincurve



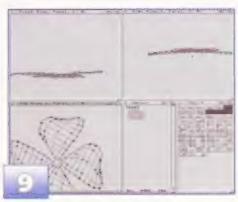
Depending on the shape of your petal you may find that there aren't enough splines on an axis. To remedy this try selecting Reparametrize again and select V or U from the option window. An even spread of splines will make the mesh flexible.



Delete the line because we don't need it, but we will need more than one petal. Go to the menu Project/Macros/Record, select the mesh, duplicate it, rotate the mesh about 45 degrees on its end and select Project/Macros/Record again.



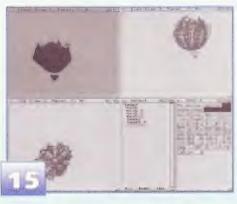
Now select Project/Macros/Repeat Current and enter two, or however many copies you want, for the repeat count. This should give you four petals, you may want to position and rotate them very slightly in any direction afterwards for random positioning.



Next, select the petals and select a few knots by shiftdragging the pointer over them. The thing to bear in mind when selecting them is that these points will form the creases in the petals so keep them in the style of the flower you're creating.



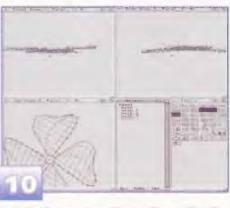
Go to the front or side view and click in the centre of the petals again. Pull the line out to the left end of the petals, left-click, move the pointer up until you get the shape you want and left-click again.



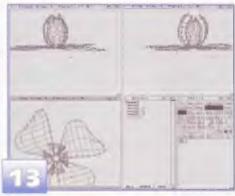
if your flower needs them, create a central bud and one of those base thingies that connects to the stem (sorry never liked biology or botany at school). Create the bud as you see fit and try using the lathe tool for the base.



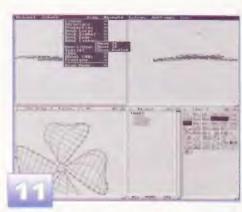
In create a stem draw an open spline using Create/Controls/B-spline Curve and a circle with Create/Controls/B-spline Circle. Then select the line, then the circle and the menu Create/Freeform/ Coplanar. Create some leaves in the same way as the petals. Apply some materials and render.



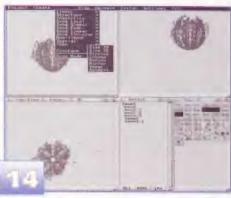
Next, select the menu Create/Structure/Group – this will group your points under a new level. Now move your new group or selected points either up or down (delete the group when you're happy) – for a greater effect try moving other points in the opposite direction.



If you're making a multi-layered flower, paste the group of petals you copied earlier into a new level. You may consider scaling-down this new layer slightly and rotating it, then repeat the bending process. Repeat this step as many times as needed.



At this point you might want to copy the petals - if you are modelling a many petalled flower like a rose rather than single layered oner like a lifty. Position the hot-spot in the centre in the top view, select the menu Mosilty@end Circular/Move 3d.



Again, depending on the type of flower you may need "squeeze" sections of the flower - such as the base. To do this create a new group and select the menu Modify/About COGs5irs 3d. Move to the top view scalar reduce the size of the selected points.



And there you have it. You should have created for yourself a beautifully rendered rose that would look completely at home in any English garden. If there are any particular areas that you would like us to cover in this tutorial then please write to us with your suggestions at the usual address.

Blitz Tutorial

Who would have thought creating 'compound variables' and 'Lists' could be so much fun? John Kennedy knows how to convince the most wary of us in his Blitz tutorial.

; Define list
NEWTYPE .linktype

×1.q

v1.q

v1.q

x2.q

v2.q

address\$
End NEWTYPE

Dim List hyperlinks.linktype(100)

Preparing to add some new features to the Browser program, we'll need to look at some of the special support for variables Blitz Basic includes.

I've used these features to add support to the program for links. There was already support in the listing for detecting the <a> tag and displaying the link text in a different colour, but now the program can actually do something about it!

ADVANCED VARIABLES

We saw a few months ago that Blitz can store values in variables of several different sorts. Byte, Word and Floating variables can all be defined, depending on what you need them for.

Blitz also allows you to group together existing variables to make new "Super variables". This is an idea 1. I've added a few lines to the code which detects the presence of an <a> tag:

3. This is the part which stores the four co-ordinates we need. You can comment out the WBox line to see if all is working; if it is, the link text should be erased with a solid rectangle.

The code for testing if the mouse pointer is over a link is easy thanks to us using a List to store all the co-ordinates. First, we need to add the following to the main event loop: shamclessly stolen from the programming language C and it's a good idea to pay attention since you'll find "structures", as they are known, cropping up time and again.

To define a new variable in Blitz, use the NEWTYPE command like this:

NEWTYPE .person-type

name\$

age address\$ height TUTORIAL

End NEWTYPE

This creates a new type of variable for us to use. The name of the new variable must begin with a full stop. It's important that you realise that it doesn't actually create any variables, only a template which we can use.

Let's create a variable and assign some values.

george.person-type\name="George" george.person-type\age=28 george.person-type\address="52 Arcacia Avenue" george.person-type\height=179

NPrint

george\name,george\age,george\address
,george\height

```
Gosub flush_text

v$=$tripTrail$(v$,32)
v$=$tripLead$(v$,32)
If preview=Off

USEPATH hyperlinks()
\timesizer*
\tim
```

Case \$200 ; Close gadget selected
Goto goodbye

Case \$40 ; Scryll bar clicked

y.w=VPropPot(0.1)*height
PositionSuperBitMap 0,y.w
Redraw 0,1

Case \$8 ; Mouse button
Gosub click

There are a few tricks here. Notice how you need to specify the variable and the variable type, then use a slash and specify the sub-variables (name, age and so on). Notice also how you leave the "\$" sign off the string name.

It can be a bit tedious having to type "george.person-type" so much, and so the command USEPATH can be used, like this:

USEPATH george.person-type \name="George" \age=28 \address="52 Arcacia Avenue" \height=179

It's also possible to set up all the variables in one go, like this:

george.persontype\name="George",28,"52 Arcacia Avenue",179

Creating compound variables (that is, variables which contain several parts) can help your programs retain a little more structure and order. When writing some programs, database applications, for example, deciding how to store the data is, in the first place, the hard part. Using NEWTYPE can help simplify matters a great deal.

MAKE A LIST

If you have done any form of BASIC programming, you'll know all about arrays. An array is a special type of variable, which contains one value. You reference the particular value you want by means of an index. For example, whereas the variable...

locations=10

...can store only one value, the array...

dim locations(100)

...can store up to 100 different values. These values are addressed like this...

> locations(1)=99 locations(50)=12

...and so on. Blitz Basic supports arrays like these, but also adds a new concept: the List. Like NEWTYPE and structures, Lists are more a C programmer's plaything, but they are very useful.

4. Finally, here is the routine which does the testing. At the moment, it finds the link and doesn't do a lot with it, but we can deal with that part later.

A List is a chain of variables, linked to another. The operations you can perform are limited in so far that you can add or delete variables to the chain, or move to the first item, or move to the next item. That's all – you can't move to a specific item, only to the next link in the chain. Think of a List as an array in which you cannot use an Index.

This sounds like quite a limitation, but it's not. In practice, you will be looking through the variables in the List, one after the other, anyway and so there is no need to be able to specify a particular element.

You might be wondering why you would want to use Lists in the first place. The advantage of the List is that only essential data is stored. When you dimension an array, it's possible that you aren't going to use every element in the array – nevertheless, this memory is still reserved for you. A List only takes up as much memory as is needed.

Imagine that you need to store information about a three-dimensional object. You need three co-ordinates, X,Y and Z to reference the colour (a single byte in this example) at that point in space. If the X,Y and Z co-ordinates range from 1 to 1000, you might use a traditional array like this:

dim colour.b(1000,1000,1000)

You can see straightaway that this one array has consumed 1,000,000,000 bytes of memory. Not many Amigas have this much memory available!

Using a List, you can only store information when it is actually needed. Like this:

NEWTYPE .pixel
x.w
y.w
z.q
colour.q
End NEWTYPE

dim list space.pixel(1000)

This creates a List with at most 1,000 elements. So far, none exist, so let's add some:

AddItem colour() space()\x=10 space()\y=100 space()\colour=23 AddItem colour() space()\x=123 space()\y=10 space()\z=343 space()\colour=99

You can continue adding variables to the List until 1,000 items are present.

To look through the List and print out all the co-ordinates which contain a colour, you only need to do this:

ResetList space()
While (NextItem space()
USEPATH space()
NPrint \x,\y,\z,\colour
Wend

Think about how much hard work it would be to print out the List using the more traditional three-dimensional array and you'll be convinced.

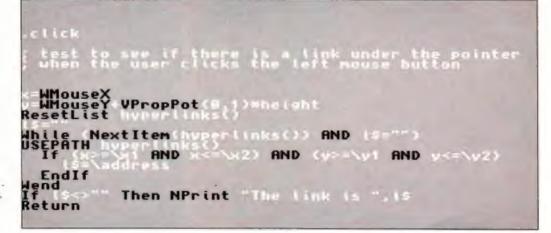
THE LISTING

Whenever the Browser program finds a link embedded in the HTML document, it addresses the location of the "hot spot" and the address, to a List variable called "hyperlinks()". We need to store four co-ordinates, described as an imaginary rectangle around the link text, and a string. The code defining a suitable List variable can be found as pics dotted around the spread.

That's about all we have space for at the moment. Remember, the full listing is on the CD-ROM, and you can also find it on my Web site: (http://www.web zonel.co.uk/www/johnk).

moment, if there is a lot of link text and it flows over on to the next line, the program won't cope very well. It'll be a good programming exercise to fix this bug (hint- split the flowing text into different rectangles and add them too to the List).

5. Note: at the





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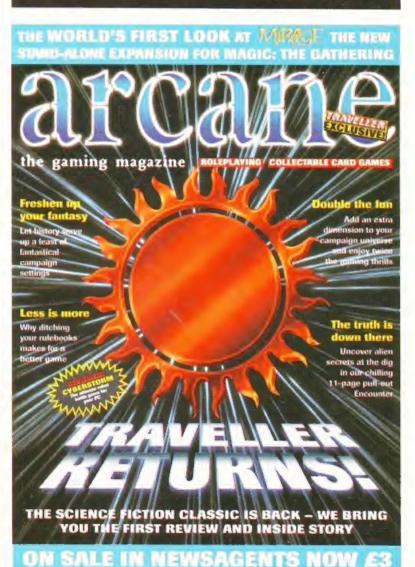
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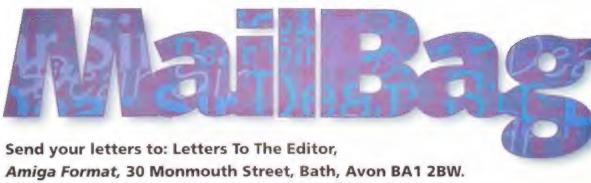
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APHRODISIAC

Just a few lines to draw your attention to the best "write up" of the A1200 I have ever seen outside of an Amiga magazine. It appears on page 156 of the July issue of Muzik and is by a jungle musician called "The Aphrodite", who, it seems, has been a long-time fan of the Amiga – unusual in the dance biz, where the standard creative kit is usually an Atari 1040 running Q-Base. Check it out, I reckon this guy deserves an AF sweatshirt for his services to the marque – see if you agree!

Don Griffith Cheltenham

Unfortunately, huge multinational publishing company that we are, I can't seem to find that particular issue of Muzik. Perhaps someone could send us one? We'll send it back honest. Maybe this Aphrodite chap is an avid AF fan anyway?



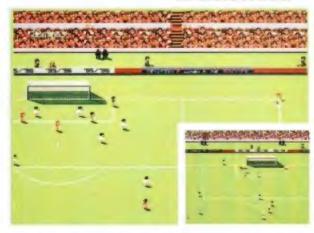
SPENDING SPREE

I own an Amiga 1200 with 6Mb

of memory, a Blizzard 1230IV accelerator, a 35Mb hard drive and CD⁵² console. Like most Amiga-users, I have stock by the machine, only to be let down by everyone concerned. I buy games and CDs; I am currently saving for a CD-ROM drive and a few of the new games titles. I'm not a nerd who sits there and works out 'silly' mathematical problems. I cannot program in anything but BASIC – I just enjoy using the Amiga's fun and friendly environment.

But... one year ago I was playing games like X-Wing and Max Overkill on, yes, a sad PC! (Not mine, I hastily add!). Now, let's get this right, all of these good games run on 4Mb, 25MHz, 486SX? I own a 6Mb, 50MHz Amiga with a hard drive and so does my mate. He's also got a Zappo drive, 1Gb Seagate and a CD³². I bet we're not the only two in Europe to have this set-up. I also bet there are enough high-spec Amigas to give any PC a run for its money, but what am I playing apart from SWOS 96:

Continued overleaf ⇒



SWOS '96 may be a superb game but it would be nice to have the option to play some hard drive installable games.

Letter of the Month

MAXIMUM SPACE

I recently decided to change the 80Mb hard drive in my A1200 to something larger. Wisdom indicates that it is cost-effective to buy the largest capacity drive one can afford and I opted to fit a 3.5" drive on grounds of maximum space for minimum cost.

I was aware that it wouldn't slot straight in and that a certain amount of juggling would be required. I do, however, know my way around the inside of my machine and I reasoned that a reputable company would not sell me an unsuitable drive. A 500Mb drive was ordered and it came complete with instructions.

It didn't fit. You could get the thing in and the instructions were reasonably clear; but it was just too large to allow the keyboard to sit in its correct place. The machine would go back together, but there was a very slight bow to the top of the plastic casing. The company had obviously had complaints about this, because the instructions said: "Please do not phone us to say the cable is too short, it will fit". It will, but not properly!

Anyway, it all went back together, the tension on the top casing was not noticeable and the drive continues to work well. But when I changed my memory card for an accelerator card, problems started. I switched on my machine one day to find the accelerator was working, but my fast memory had disappeared.

The problem was caused by the hard drive. The motherboard is protected by a metal sheet turned down on one edge, presumably for tensile strength. This sharp edge is positioned almost over the edge connector. The hard drive (its positioning in the machine dictated by the short ribbon connector), is 'ideally' situated when pressure is applied by closing the casing, bringing the sharp edge of the sheet down on expensive accelerator circuitry, like a knife!

I was able to repair the my board by restoring the insulation on the circuitry. The accelerator card is now protected by a sheet of plastic. Nevertheless, this state of affairs is not ideal and I will now have to buy another drive.



Make sure you check with the distributor whether the drive will fit before buying.

This does not apply to all 3.5" drives. The Eyetech drive is obviously slimmer and, equally obviously from the photograph in the ad, does not affect the placing of the keyboard.

Nevertheless, I would suggest that Amiga-owners consider their options carefully before purchasing a nonstandard drive. Is the comparatively small financial saving worth the hassle? My "saving" is going to cost me the price of a new 21/2" drive.

Tag Gorton

ONE

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There are a couple of points here. Many companies do sell drives that will not comfortably fit inside the Amiga casing without a certain amount of modification. This isn't a problem, so long as their customers are aware of this situation before they part with their cash. If you want to cut up your casing and install an oversized drive, that's up to you, but you should be informed that you will have to do this before you buy the drive.

There are some slimline 3.5" drives which will fit in the A1200 without much jiggery pokery, and these do not tend to be much more expensive than their larger counterparts.

Well done for spotting the problem with the casing. I have never been a fan of the metal shielding, and to be honest it's only real value is to stop you inadvertently dropping things onto your motherboard when you have the lid up. A good strip of cardboard can often be a better insulation material though, as some plastics can build up a static charge which could zap you (not so bad) or some expensive RAM chips (very bad).

Thanks for your comments and you've won a nice AF sweatshirt.

profits fo undreds Up until

UNAMERICAN GRAFFITI

After reading the review of the Graffiti graphics card in your August issue, I decided to buy it since I've got a demo of Nemac IV which supports the 'chunky screen-mode'.

When I phoned Power Computing, they told me that it is not currently in stock and might never be because they aren't sure whether there's a big enough market for it.

Now, maybe I'm wrong, but I would say that the lack of this screen-mode is probably one of the reasons software houses are leaving the Amiga, since, if you look at the PC market, most big names now use this style of display, whether it be Doom

clones or something else. What I am trying to say is because of its cheap price, if everyone had this card, maybe the software houses would produce Amiga-versions of some

of these great games.
Also imagine AB3D II supporting this – it would this, since even on my 10Mb, A4000/30 it's only really playable at its lowest resolution and original *AB3D*

But, as usual, it looks like a good idea isn't going to take off because the man I spoke to at Power Computing told me that there's no point in releasing the card without the support of the

software houses.

Please, please, include some options in future software to support this card, (and patches for older software too). PC software has support for various different video and graphics cards in its games software, so why doesn't the Amiga? If it increases sales, it will be good news for everyone, software houses and Amiga-users alike.

It is, unfortunately, one of those vicious circles. The software developers won't support the card unless it is in wide use, and obviously the manufacturers can't sell it in sufficient numbers unless there is some software which

lent product that v may sadly never se

(Even SWOS is still on floppies.) There is nothing, absolutely nothing!

Yes, there are some brill arcade games that run on an A500, but Amiga owners want a FIFA Soccer that requires a hard disk and 6Mb; they demand slick 3D car games, like Car & Driver, which in fact runs on my Dad's 1Mb 386SX!

Amiga Tech should demand that all games have to be installed on to a hard disk. It's a gamble, but the PC did the same and won. All new games should be 2.04 based -

ves, I know, it's not fair on ORG chipset, but we've got to move on. I mean, look at Microsoft: "If it doesn't run, upgrade vour PC".

Compare this with the great leaders at Amiga "Oh, it will not run on A1000s - come on chaps, let's shelf that 6Mb hard disk version and start on the 512K".

So, come on, everyone upgrade! Save your money and buy a hard disk - it need only be a £50 120Mb one; it will do just fine. Buy memory, buy accelerator cards and let's get the Amiga back to doing

NO DOUBTS HERE

To all you Amiga-users out there who are starting to doubt the Amiga: Did you see Babylon 5 on Sunday 16th June...? I rest my case

D.R. Minns Chester

what it does best, running slick games and programs better than anyone else. I bet none of you have tried Seagate's range of 3.5 inch hard drives, I have fitted 1Gh drives to A1200s and even A600s they are slimmer and very quick, so they'll fit under the keyboard without a squeeze!

Try this - 72pin SIMM, 32-bit RAM - £50 for 4Mb. That's not even as much as a Playstation game. Put £20 away a week and in three months you have the fastest A1200 for 10 miles.

Ask anyone who has left the Amiga for the PC world and they'll all tell you that the Amiga takes big chunks out of PCs in every way!

"But it's not fast enough; the 3D games are crap and swapping disks is slow!" Swapping disks is just so insulting to our computers; it should be able to just load it all in without floppies. I'll always be an Amiga boff, but unless we all rally together as a team, we'll always be laughed at by the Mac and PCusers of this world.

Think about it, what do you really want? The best computer in the world to date, or a 'has-been'?

Come on Amiga-people, put your money where your mouths are... You won't be let down.

Daniel Jones Blackpool

Some people legitimately point out that they bought their Amiga in the first place because it was affordable and they wouldn't have to shell out loads of money upgrading it. Some of these people are the same people who have gone on to buy PCs strangely.

But the average users system is generally getting more advanced. It will be easier to tell when our survey has been compiled, but a lot of you now have AGA machines, and a significant number also own some sort of accelerator card. Hopefully we will be able to present these figures to games companies who may reconsider producing more HD installable software, and games which make use of accelerators

HAPPY AND CONTENT

Why do 1Mb A500 owners complain about "software incompatibility" and "not enough money to upgrade"

Listen, most software will work on your crummy machines, like the excellent Worms or Sensible Soccer. Why do you complain?

I have an A600 and a few weeks ago I was stuck with 1Mb RAM. Until, that is, I took advantage of your A500+ and A600 2Mb expansion offer. I suggest that all A500+ and A600 should enroll in this offer, because 2Mb is becoming a new standard and 1Mb games may be a thing of the past in the next few years.



Worms will run on any Amiga. Even an A500 with only 1Mb.



LUSCIOUS LIZARD

In the August issue of your excellent magazine, pages 77 (Workbench), 103 (Mailbag) and 97 (Real 3D version 2) all refer to Real 3D.

On page 103 and also on page 97 (the new tutorial) you show, once again, the excellent head of, shall we say, a lizard.

As I have followed and saved

As I have followed and saved every tutorial of Real 3D by John Kennedy I was quite disappointed to see the new tutorial by Graeme Sandiford. Mainly because I would like to achieve something truly wonderful, such as that lizard head. (Also, I do not have Real 3D version 2.)

Would it be possible to give us one more tutorial, showing how to achieve this, including that wonderful texture. Perhaps you could stick it on one of your future Coverdisks? This would be of great benefit to us 3D-users, who have not managed to go any further than your brilliant tutorials.

Even if my A600 should not be up to doing this, it would give me great satisfaction to try and get a little further than the basic shapes, etc.

shapes, etc.

Thanking you in anticipation of your help.

L.H. Vye-Parminter Cardiff

The lizard-head picture was generated using Real 3D2. However, it wouldn't be impossible to create such an object in the original Real 3D.

I will have a word with the elusive Mr Kennedy and see if he will do just one more encore on some more advanced modelling techniques.

The beautiful lizard head which illustrates the power of Real 3D2.

My favourite Amiga magazine is Amiga Format. I originally bought your main competitor, but I felt there really wasn't much to read, if you know what I mean.

Finally, can someone give me a copy of the Final Writer 4 Lite Coverdisk because I have lost it?.

Paul Bowen Birmingham

It is true that some of the most successful Amiga games ever, run happily on a standard machine.

Lost it? Outragrous, Surely everyone files them away securely, knowing that sooner or later they will be looking for a particular disk with a particular program on it. Well, just this once we may be able to help you, but we've got our eyes on you my lad.

STAND BY MY MACHINE

I would like to congratulate you on the article you did regarding fitting a PC Atapi CD-ROM to an Amiga. I've wanted a CD-ROM for some time now, but they have always been out of my budget range. But not any more thanks to that article.

The only real problem I had was getting hold of a lead, so that I could still use my hard drive as well as the CD-ROM. After searching all over, I managed to track down an IDE BUS adaptor from Micronic in Germany, which only cost £10, but with P&P as well, the price is £32. The adaptor is just what the doctor ordered. It's just a shame that you don't seem to be able to get hold of it in the UK.

It is actually possible to get a CD-ROM up and running for the same price as an external floppy drive. I believe that before long there is going to be a very large upsurge of interest in the CD area of software. I know that the CD editions of your magazine vanish like gold dust at our local WH Smith.

I just hope that Mr Buck is watching this surge of interest. With the savings to be made using the Atapi PC Tower cases, it can't be long before the new owners start putting re-vamped A1200s into nice Tower units and give it a sensible price tag.

A lot of people revert back to the old days of 8-bit machines when they see Amigas in an all-inone unit and sadly label it as a games machine, not knowing what a brilliant all-rounder it is.

Amiga-users worldwide have stood by this machine. Now is the time for new owners to stand by us. We have been fed with false promises in the past, but this could be a bright, new beginning. Let's hope so.

Is there any chance that Amiga Format may do a Tower hardware project for the Amiga in the future? I know there are PC case kits on the market, but these tend to be a bit pricey. Keep up the good work.

K. Atkins Hull

Well, we were supposed to be doing a round-up of tower systems in this very issue, but shipping problems and several thousand Orangemen foiled that plan I'm afraid. Hopefully we will be able to bring you that feature next

Continued overleaf ⇒





ARE HERE



We've had lots of positive feedback concerning the Atapi CD-ROM feature we ran in the July issue of Amiga Format. Turn to page 86 to order that issue.



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and be maken a



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102

issue, and we will be including a "Build your own" option for comparison. Keep reading...

ARTISTS AHOY?

I am trying to code a KGB-style game. I am going to do the programming (in Amos Pro) and my friend Steven is going to help me work out the story and come up with other ideas, but I desperately need an artist who can save their work in IFF format, non-AGA. (like DPaint, for example).

I need an artist to draw all the characters and backgrounds. We are going to release the game in the Public Domain as shareware. Please, could you print this letter so that if there are any readers who are are interested, they can write to me.

Enclose some examples of your artwork if you like. I would prefer it if you were a teenager – I am only 13 myself.

Mark Wadham 25 Roslyn Close St. Austell Cornwall PL25 3UN I hope some of our talented readers get in touch, and of course we would dearly like to see the game when it is complete.

MIXED BAG

As a young boy I was always told to voice my opinion, so brace yourselves because here I go...

To anyone considering purchasing an Amiga 1200 – go and get one now! If you buy one second-hand, the prices are perfect. You can pick one up for around £200 and, believe me, you won't regret it. Just think to yourself: "I can expand as my budget allows; I can enjoy excellent serious software and be amazed at superb games with top-quality graphics and sound".

One snag though, PIRATES! Go away – we don't need you, so why not try your luck with the PC instead. (I'm pleased to get that off my chest).

The software for the Amiga in high-street stores has nearly vanished, but don't cry – just take a look through the Amiga Format software galore. You get a better review than the back of a box and it's cheaper, cheaper, cheaper...

To Viscorp, a small suggestion for success – advertise! Yes, I know it costs, but I'm sure it's worth it. Look at Pentium, for example: bloody expensive computer, but great adverts on TV to attract attention and increase sales.

I do hope the Amiga
1200 is not a dying machine
– it would be such a crime to write
it off as a waste of money and time.
It's far from that and us Amigaowners are praying that Viscorp
will do the right thing.

Just one other thing to those at AF—you do a fine job with your mag each month, and now with a CD... "yes, yes, yes". If you could tell us the postal address of Viscorp, then maybe a few letters of support wouldn't go amiss.

Mr. P.J. Vallier East Sussex

Well, I wouldn't have liked growing up in your household then. Did you used



The brilliant A1200 - if you don't yet have one then get one soon.

to rant on about the relative merits of garden versus processed peas, or the injustice of being sent to bed at 8pm when independent research shows that a young child's mind is most receptive to new information later in the day? Anyhow, thanks for your comments. Viscorp's contact address, should you want to give them an earful is: 11 I North Canal St. Suite 933
Chicago, IL 60606

USA 001 312.655.0903 voice 001 312.655.0910 fax

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TO PC OR NOT TO PC

In Brazil Amiga-users aren't numerous, but we do exist! I decided to write because in South America it's almost impossible to find information about the Amiga 'twists and turns' (Escom, Amiga Technologies, Viscorp...).

Despite all the insults I hear from PC users, I am not interested in selling my machine and buying the most recent "PC PENTIUM WINDOWSGATES".

I wish for some security and stability... and the ridiculous idea of selling and buying, buying and selling a computer annually seems poor and vulgar.

I had a ZX81, a Spectrum and a MSX before I bought my Amiga and I never regarded them as just machines.

I was recently asked to teach computing and I tried to convince the school's Principal to use Amigas. He didn't know anything about it and almost gave me an "OK", but at the last moment a PC-user told him: "You'll never find someone to repair it if it has a defect" and: "Nobody can live without Windows".

I'd be happy if you could inform me if, living in South America, I could collaborate with your magazine and if not, please print my address so I can exchange information about my country and Amiga software with other AF readers. As we say in Brazil: ATE MAIS VER (meaning goodbye)!

Claudio Monein Padre Pedro Alencar No 31 - Blios Apt. 02, Fortaleza, Ceara Messejana

Brazil

We are always pleased to hear from our overseas readers. I think



sometimes people here forget how lucky they are, as it must be much harder to keep up to date in places like South Africa, South America and Australia.

If you have any ideas or suggestions for the magazine, please write in. Our overseas readers are just as important to us as our readers in the UK.

In the meantime I hope that your fellow South Americans read this and get in touch. As we say here, "Cheers mate".

FOND FINAL FAREWELL

I recently came to the painful conclusion that the Amiga-scene is dying a rapid death and consequently sold my A600 off cheaply to help finance a Pentium.

As this shall regrettably be my final letter to you, I'd just like to say a few things.

Firstly, thanks for such a superb magazine. Amiga Format matured from humble beginnings to become one of the best in its field, totally dedicated to the Amiga. It's a classy read, sometimes funny and always informative, even when I didn't agree with what you had to say.

Secondly, I would like to wish you and the rest of your staff every success for the future. Do you still truly believe there is hope for the Amiga-range after it has been mauled by Escom? If so, you have much more faith in this company than I do!

Virtually no space is made available to the machine in my local stores so how can it possibly go on and I gave up on Escom a long time ago – ever since their guarantees proved to guarantee nothing.

If PC Format is anything like your magazine, at least I shall be in for a great read. Thanks for the many years of pleasure which you have given me, and so long!

David O'Conner South Yorkshire

We are sorry to see you go. As you will now no doubt know, Escom have paid for their foolishness, and maybe the Amiga has more of a future than anyone realised. I hope you have fun with your new machine, though I think you'll quickly realise it can never replace an Amiga.

As for PC Format, I should think you will find it fairly similar to AF in many ways. I think they have a larger collection of AF back issues than we do...



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This is just a small selection of our Ribbons - Ring for those not listed									

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AMIGA FORMAT COVERDISKS









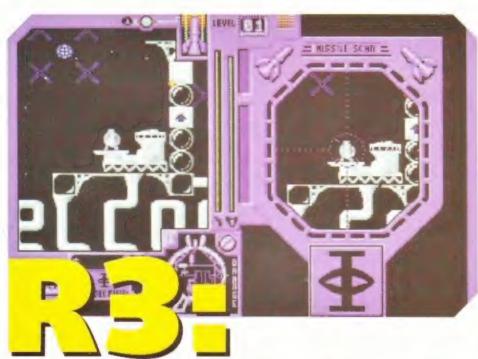








Design your own colourful fonts with Font Machine. Plus the latest version of VMM and the fabulous EdWordPro. A gravity game that has entertained for years. This new version has more bells and whistles than a football crowd.



The Art of Rocketry

ravity games have been doing the rounds for years. Sister mag, Amiga Power, recently made one number two in their all time top one hundred. All it takes is a simple idea, polished til it shines and everyone is hooked. R3 fits the bill exactly.

The game can be played by either one or two players. Two players can play together or against each other. The basis of the game is simple, you fly a space ship in an environment where the gravity pulls you down (as it would). This means mastering the balance between thrust (forward on the joystick) and gravity so that you can glide effortlessly around the screen. Too much thrust will accelerate you too much and you'll fly into the wall or ceiling, damaging your craft. Too little and you'll drop on the floor.

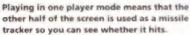
To direct the ship, you can rotate it and, should you find yourself flying towards an abject, you can turn around and thrust the other way to counteract your ship's inertia. Control of the ship is done through the joystick or keyboard. If two



OCTOBER 1996

Another fine collection of programs for you. Convert fonts into Amiga colourfont format. Master gravity control and take advantage of the latest versions of some Amiga classics.





players are playing then the screen is split and you can both use a joystick or one or both use the keyboard.

When you play the game in one player mode, you'll see a set of objectives, which are containers that need collecting and returning to your base. Two players can play together to complete the mission or you can choose the dogfight option where the aim is to blast each other out of the sky. You have two weapons, normal shot (fire button) and missile (pull back on joystick and you also get a number of credits for a nice new ship, which you can trade in later for a better one, if you can afford it.

To choose the controls, use the left shift button for player one and the right shift button for player two. The type of game is selected by F1 − One player, F2 − Two player co-operation, F3 − Combatative. (Incidentally, some 030 owners playing single player may find that landing on landing sites is impossible − this seems to be overcome by pressing fire just as you land. This demo of R3 can be registered, either through the authors in New Zealand or through F1 here in the UK on 01392 493580. It costs £10 and offers lots of new features.

THE WORMS

An absolute classic arcade game. You control a worm which continues moving and grows constantly, becoming longer as you go. The aim is to get the longest worm you can and use it to trap the other player. You cannot hit walls, turn back on yourself or hit any part of your body or the opponent's. Trap the other player by forcing them to use a single width between your body



and the wall – they have nowhere to go. The game can be played against the computer or against another player and the controls are joystick, mouse or keyboard.

FOUNDATION EDITOR

This isn't actually a game, but a pre-preview. It's the editor for a new Settlers/Civilisation type game being written by Paul Burkey. It's AGA only and the editor looks really good. You can use it to develop the landscape you want to play on, including land height and vegetation. The mouse moves the spot on the map and then you use keys to effect a change. Left Alt places the current object and Left Amiga removes it. F8 flattens to the current height. L loads a new map and S saves the current one.

Paul is looking for feedback, maps, graphics and sounds for his game. We can't wait to see it and hopefully we'll be able to get a demo. Email the author on paulb@sneech.demon.co.uk.



Foundation Editor is a luscious pre-preview of a new Settlers type game by Paul Burkey.

READ ME!

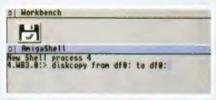
The software on this disk has had to be archived to fit it all on. Workbench 2 users will find the disk does everything for them, but Workbench 1.3 users need to format a single, spare disk in order to unpack the R3 game. Workbench 2 users can have the game unpacked to a spare disk, which will be automatically formatted or to hard drive. If you are using WB 1.3, you'll have to use the game from Workbench, so after the game has been unpacked load WB first. Foundation Editor requires an AGA Amiga and can be unpacked to another spare disk or directly to hard drive too. The Worms game can be played directly from the Coverdisk on WB 2+ machines, but, like R3, must be played through Workbench on WB 1.3 machines.

BACKING UP YOUR COVERDISK

Copying your Coverdisk is really very simple. Just follow the stages below...

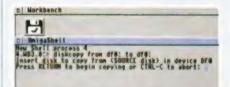


Boot up with your Workbench disk and find the Shell icon, in your system drawer. Double-click on this to go into the Shell.



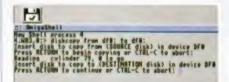
Type in the following line (with a zero, not the letter 0), taking care to put the spaces in the correct places:

DISKCOPY FROM DFO: TO DFO:

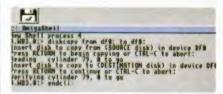


When asked for the Source disk, insert your write-protected Coverdisk and press Return.

All of the info on this disk will then be copied from the disk into memory.



Once your Amiga has read the info, it will ask for the Destination disk. Insert it and press Return. All information on this disk will be destroyed.



On an unexpanded machine, the Amiga may ask for the source disk again, because it copies in chunks. Finally, type endcli to close down the Shell.

DISK NOT WORKING?

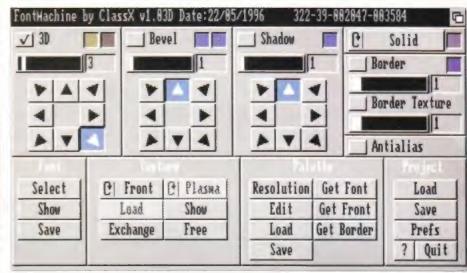
We take every care to test the Coverdisk software, but Future Publishing cannot accept any responsibility for any damage occurring during its use. If your disk is faulty, send it back, with 2x26p stamps and an SAE to:

Amiga Format (insert name of disk)
TIB PLC • TIB House
11 Edward Street
Bradford • BD4 7BH
If there is a manufacturing error the stamps

will be returned with a replacement disk.



The interface may look very boring, but you can create some stunning results with it.



Font Machine

David Taylor introduces another program for Desktop Video enthusiasts and the latest version of the virtual memory package, VMM. To use, click on the Assign Demo icon, before loading. This makes an assign needed for a library and you can cancel this alterwards by either re-booting or double clicking on the Unassign icon.

You'll see that the interface is very intuitive. In the background a separate screen displays the font, the texture to be applied and the palette. Each section has its own controls in the bottom of the screen, next to the toolbar.

If you want to dive straight in and see what the program can do, select a predefined demo project using the Load button. Alternatively, start a project of your own by selecting a font from the Font section. You will see it appear in the screen and you now need to select a texture to be mapped onto it. You need to decide where this should be and whether it's on the front or on the side (the fonts can be made to appear 3D). Textures can be just a simple picture, for

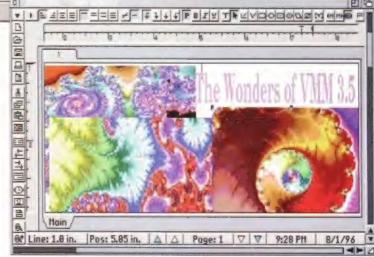
lassX are the company who brought you X-DVE, last month's Coverdisk and this month we have another program from them.

Designed for DTV Amiga users, Font Machine can take normal fonts and map textures or pictures onto them. The fonts are then saved as Amiga colourfont format. If you don't have an application that uses this format, then it will be of little practical use, but it's still fun to use and have a look at the results. This version is only a demo so you cannot save out fonts any larger than 25 point.



VMM allows you to open much bigger pictures than you otherwise could, in programs like Wordworth, Final Writer and Photogenics.





example a person, or more "normal" like fire. At the end of the day, they are all simple picture files, so you can use whatever you want.

If you don't want to load a picture, get Font Machine to create a texture for you. Load a brush and click on the cycle gadget where "brush" is displayed. This will allow you to choose from plasma or pattern. Both of these types can be user-defined, and are created by clicking on the Load button.

If you don't like the way the font looks with your texture then remove it by clicking on the Free button and load another. The Palette selection next to Texture allows you to change the resolution and the number of colours.

Adjust the look of your font using the sliders along the top of the toolbar, These allow you to choose the number of pixels to be applied as 3D, bevel or shadow effects. Each effect is activated by clicking on the button next to it. Active ones show a tick. When you have got the effect you want, click on Save Font and the font will be rendered and saved out.

If you want the full version of the program, it is available from ClassX who can be contacted on 00 39 587 749206 or emailed at; classx@pisoft.it.

VMM 3.5

Let's be honest about this. You can never have enough RAM. It doesn't matter if you trebled your memory when you bought that 4Mb SIMM. As soon as you try and do anything with graphics, especially with today's powerful, memory hungry applications, you'll run out of RAM as soon as you open anything bigger than a thumbnail. You could just go out and buy a new SIMM but if, like most of us, you're not made of money, then there is an alternative. All you need is an Amiga with an MMU and 2Mb RAM. You also need a hard drive for the program to use space as virtual memory.

You need to install the program and note that the user interface has two versions, one which uses MUI and the other which uses the BGUI library, so you'll need one of the two. When you load you'll see an interface which shows which programs are ready to use VMM. If you want to add one to the list, it's just a case of selecting the executable from the file requestor.

READ ME FIRST!

To install the software from the Coverdisk you need at least an Amiga with Workbench 2. Some of the programs may have higher system requirements and may even need additional files, such as libraries which are not included in the package. De-archiving the programs is simple. Simply boot the Coverdisk and select which package you want to install by pressing the corresponding 'F' key. If you are de-archiving to floppy, then you need to have three disks ready. Don't worry about formatting them as the Coverdisk will do that if necessary. If you are installing to hard drive, then you can do so directly. If you have a non-standard hard drive like a SCSI one, you can boot that and install everything by using the All to HD icon. Remember that even after de-archiving the Coverdisk, you may have to install the program using the Installation icon for it to work.

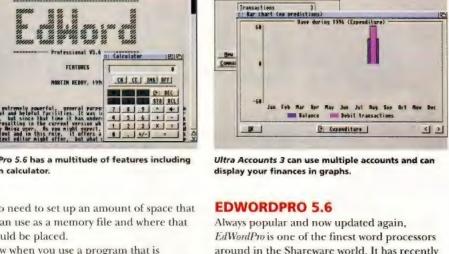


EdWordPro 5.6 has a multitude of features including a built-in calculator.

You also need to set up an amount of space that VMM can use as a memory file and where that file should be placed.

Now when you use a program that is enabled for VMM, you will find that it can use much larger projects and will load them in using the new memory file. The list of programs that can use VMM is extensive from Final Writer 5 and WordWorth 5 to Real 3D and Lightwave. Some programs, like Photogenics 2, may have built-in virtual memory, but you will find that VMM is far faster. You must remember that virtual memory is much slower than proper RAM as it is running from hard disk and as such is no real substitute if you are going to make constant use of it for the same task. However it will allow you to work with far larger files than ever before. My humble 6Mb Amiga suddenly has 56Mb!

Don't forget that this is a Shareware program and if you want to keep it, you must register. The cost is 30DM (about £15) and all the details are in the guide.



around in the Shareware world. It has recently been updated and now offers such features as auto-correct as well as the usual text editing features that you'd expect from a powerful text editor. There's full ARexx support, which means, amongst other things, that you can integrate the ASpell Shareware dictionary interface and files so that it can spell check in any number of languages. (The ASpell package is available from Aminet or can be found on APCD number 2.) The program can be used to write anything from a letter to a novel, but I find it also works excellently as a system editor for editing AmigaDOS scripts, especially as it allows the insertion of the Esc character which so many editors won't. Also included in the package is a calculator which can be called internally or used separately. The program can be registered so that you can use direct saves instead of always having to use the Save As function and you can have the benefits of ARexx scripts. This costs £15 and is available from F1 Licenceware on 01392 493580.

ULTRA ACCOUNTS 3

This is a home finance package which will allow you to use multiple accounts and set up debit and credit standing orders. You can predefine details of common transactions to save you time later and have the program remind you of important events such as bill payments. Accounts can be set up with minimum and maximum balances and all files are saved in a password protected encrypted format so that your details are safe. Should you wish your finances can also be displayed in a graph for you to make an easier analysis of your income and outgoings.

The program is very intuitive to use, but full details, should you need them, can be found in the docs. This program is Shareware and although the registration fee is £10, the author says he is willing to accept "poverty" registrations if you send him something for his efforts. Read the guide for details.



The VMM interface allows you to select programs that will use virtual memory and the amount you set aside.

CAN'T GET YOUR DISK SOFTWARE WORKING? CALL

(MON-FRI 2PM-6.30PM)

0191 584 0682

FORNAT COVERDISKS



EXTRA Your Coverdisk should be working fine, but if it's not, these hints, tips and corrections should sort out the problem quickly and easily.



ZEEWOLF 2 (AF81)

Many readers have phoned in saving they are having problems with Zeewolf 2. One meg A500 users who have two floppy disk

drives should disconnect the external drive to make more memory available to the game. Unfortunately Zeewolf 2 just doesn't seem to work at all with some accelerator cards.



FINAL WRITER 4 LITE

If Final Writer's pull-down menus won't pull down it is probably because you are

running a menu enhancement commodity (i.e. MagneMenu), Such programs don't work correctly with Final Writer and should be disabled. In order to print documents it is vital you have the correct printer driver installed in the devs/printers drawer of your Workbench disk and that the driver is selected and configured using the printer prefs utilities. Your Workbench manual describes how to do this. To print larger documents Final Writer requires more memory. If you're using the program on a 2Mb machine, try to maximise the amount of memory available by removing any utilities or commodities running in the background - if you still experience problems, use Workbench's prefs utilities to alter the screen to a lower resolution screenmode. Lastly, it was inadvertently stated that Final Writer works on all 2Mb+ Amigas. Sorry, but it's incompatible with old Kickstart 1.2/1.3 machines.



BREED 96 (AF86)

If when double clicking the Install_Breed96 icon you get an error message telling you that

the command IconX cannot be found don't panic. This doesn't mean that your Coverdisk is faulty, it's just that some earlier versions of the Workbench disk don't contain the IconX command. To get around the problem; from Workbench open up a Shell window and type the following lines (pressing return after each);-

copy c:execute RAM;

execute AF86b: Install_Breed96

Have your blank formatted disk and your Breed % disk ready and insert the appropriate disk when prompted. Please note that even though the labal for the Bred 96 disk says "AP86a" it is, in reality, disk number AF86b.

OCTAMED TUTORIAL (AF86)

If you are a Workbench 3 user experiencing problems in trying to read the OctaMED tutorial guide document then try

changing its icon's default tool from "Amigaguide" to "MultiView". If you are unsure of how to do this don't worry it's not too difficult. Click once on the icon called OctV5 Tut, Guide, pull down the "lcons" menu from the menubar at the top of the Workbench screen and select the "Information" menu item. This will bring up a window, in which halfway down you will see the words "Default Tool:" followed by a small box containing the word "Amigaguide", clicking in this box will give you a text cursor, now using the backspace and del key erase completely the word "Amigaguide" and type in the word "MultiView", press return then click on the Save gadget (bottom left corner). It's worth remembering that the same solution should work for other Coverdisk document files that try to load tools (e.g. Muchmore) that you don't have.

MISSING TOOLS?

A common problem is that not everyone's Workbench disk has a copy of the Amiga Installer tool on it. Once unpacked, some Coverdisk software needs "installing" before it can be properly used. The authors often include a script that will copy the required libraries, fonts etc. to the correct place on your system. The icon for the script is usually a picture of a floppy disk with a wire and plug coming out of it. If you get an error message Unable to open your tool 'Installer' when you double-click such icons there is a solution. You need to find and then copy the Installer tool from another disk to your Workbench floppy disk or Workbench hard disk partition. If you are using floppies then use a copy of the Workbench disk and not the original, also you may need to make some space on your copy of Workbench by deleting some non-essential tools such as the clock, calculator etc. The

Amiga Format Coverdisk 79a, Digita Organiser 2 demo has the Installer tool on it. If you don't have that Coverdisk then try searching for Installer on disks belonging to other applications that you own, especially paint programs, word processors etc. Installer doesn't usually have an icon and is often in a drawer such as the C drawer which itself rarely has an icon. So when looking for it make sure that you switch on Show; All Files from the Workbench Window menu for every disk and drawer you look through. When you find Installer simply copy it by dragging its icon into the Utilities or C drawer of your Workbench.

GENERAL PROBLEMS

The most common problems are Read/Write or Checksum errors which occur during the decompression process. It is important to note which disk is in the drive when such errors occur - is it the Coverdisk or one of your own disks? If it's one of your own disks then that's the disk with the problem. Did you format your blank disks correctly? Try re-formatting them and do a full format not just a quick format, use the verify option and make sure you format from your Workbench, not from utilities like X-Copy. Disable Directory Caching, Trashcan and International Mode. Don't decrunch to HD (High Density) disks as these can be unreliable. Always write protect and back up your Coverdisk before you use it.

FAULTY DISK?

Please remember that the technical helpline above is purely for difficulties you have getting the programs to work properly. If our disk is physically damaged, bent, broken with a loose or missing shutter, it should be removed to the duplicators for a replacement at the following addieses

> AF DISK NUMBER XX TIB PLC TIB HOUSE **11 EDWARD STREET** BRADFORD 8D4 7BH

get saying: "Read/write error". "Disk invalidated" and "Checksum Error". In this case, the disk has been damaged and needs

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Features:

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IDE-1.6G 1.6Gig hard drive	
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including multicoloured disk labels	.£25.00
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Complete CD Rom for all Amigas

Quad Speed CD Rom for A500£129 (needs Alfapower V6.8 or higher) Quad Speed CD Rom for A600/A1200 £149 (inc CD32 emulation) Ouad Speed CD Rom for A1500/A2000/

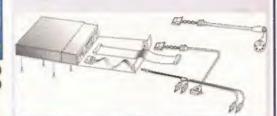
External IDE CD Rom Upgrade Kit

comprises of:

Metal case, screws, Power Connector (draws power from disk drive port) Power Connector (for optional external Power supply), IDE ribbon cable, Stereo Audio Cables.

Kit price £39

A4000£109



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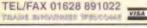
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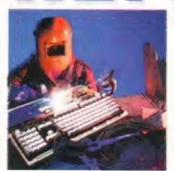




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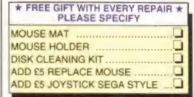
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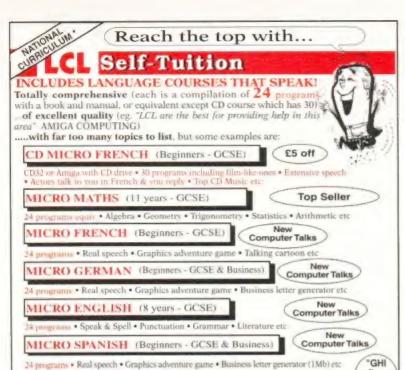
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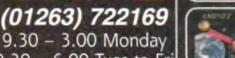
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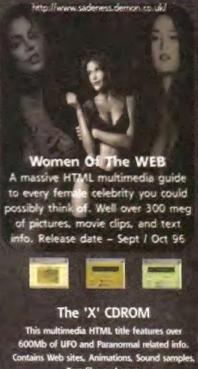
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FORMAT CD COVERS D

It's an easy question to answer this month as Ben Vost takes you on a guided tour through the plethora of programs on this month's CD.

o what's new? Well, we were going to bring you an exclusive demo of Myst for the Amiga (it would have been an exclusive because it was over 20Mb in size and not even a certain Amiga mag could fit that many disks onto two floppies), but alas, alackaday, we couldn't. For the full scoop check out our news pages on why we couldn't put the demo on the CD and why we think Brøderbund are meanies. So what else do we have for you? We have the images to go with our Multimedia running tutorial, the Bath extravaganza, in splendid PhotoCD format as well as conversions to 24-bit IFF files, just to make it easier for you, dear reader.

In addition to these gorgeous images, taken with my own fair hand, we have demos of all three new products from the rather groovy Haage and Partners; Storm C v1.1, Storm Wizard v1.1 and Art Effect v (yes, you guessed it) 1.1. Art Effect is a brand new image processing and paint program that German magazines are already calling "Photoshop for the Amiga", it really is superb and I urge you to check it out immediately.

In addition we also have all the updates

for PageStream to take you to version 3.1 and a handy tool to let you preview all your Final Writer fonts.

If you want all the best new shareware, then you've come to the right place. APCD5 has all the greatest new programs from Aminet to enable you to spruce up your Workbench, play music, edit web pages and so much more there wouldn't be the space in the whole magazine to tell you about it all.

On the fun side, we have some of the greatest shareware games including graphic adventures (DWPsychoWard, Rescue Elvis), Doom clones (Trapped, AMRWolf) and conversions of favourites old and new like Diamond Caves (Boulderdash), Scions (Warcraft II) and Aerial Racers (Skidmarks). We even have a game you can play over the Internet – BattleDuel, a remake of the old Artillery game. Now how about a internet multiplayer version of Worms?

As usual, we have a great range of Reader Submissions, ranging this month from tunes to talking time pieces, from *Birdie* to *BlackJack* and from Amos extensions to add-on levels for *Wurms*.



Bath is a beautiful city and it is captured in PhotoCD and IFF format on this month's cover CD to accompany a mammoth new tutorial series on multimedia.

GENERAL ADVICE

Most of the programs are designed to run straight from the CD, thus saving your hard disk space, but they often need assigns to make them work properly. If you see icons like these two in a drawer you should double click on the one with the arrow pointing to the right before you start using the program, and double click on the icon with the arrow pointing to the left once you've finished with the program.

If there isn't an icon, but the program still asks for assigns, your best bet is to install the rather excellent and terrific MultiCX (AFCD4:Serious/Shareware/Workbench/MultiCX 2) to your hard drive and run the program. One of MCX's abilities is to allow you to assign things on the fly and this can be a big help. If you find MCX's tooltypes a bit of a headache to handle, then you should install MCX Prefs (the MCXP316 drawer in the same directory as MultiCX). This gives you a GUI prefs tool which allows you to change MCX's settings.

READER SUBMISSION PRIZES!

Look out for the drawers marked with the £ sign! These will get you a £30 prize. Remember, we are constantly looking for new and interesting reader submissions to put on our CD.

Next month we will be particularly looking out for reader games and utilities. Icon collections would also be nice just to make a change. If you are interested in making a contribution to AFCD6, but you don't know how to go about it, then check out the readme file in the ReaderStuff drawer – it explains how best to send in your stuff.

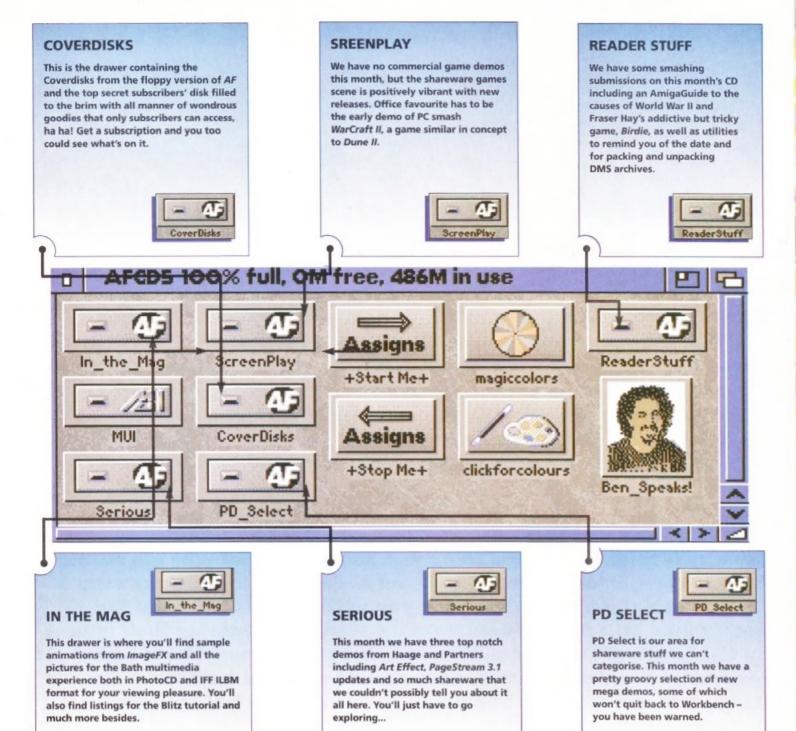


Loads and loads of lovely reader submissions. Submission... don't you love that word, hmm?

- Richard Thompson gets a prize this month for his splendid little extension for AmosPro called CoolStars
- Thomas and Andrew Venables get their £30 for their Worms levels and the music prize for this month goes to Matthew Stoodley for his bizarre module called Trippin' on Fun

If this is the icon used for the drawer with your name on it, then you're an AF winner!





Icon see for miles and miles...



We are particularly on the lookout for icons for the AFCDs and we need is icons for the following file types:

Animations Pictures Mods **Programs**

(some demos, etc. don't have icons) Anything else you can think of would also be greatly appreciated. We would prefer the icons to follow the MagicWB style (although we'll look at anything) and if we choose your set, you'll get a big thank you and your icons used forever after on our CDs... isn't that nice?











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Please note that the helpline staff provide assistance with technical problems directly related to our cover CD and cannot provide training on the software or hardware in general.

Amiga geht Zuhaus?

There are some serious questions we should be asking about the future development of the Amiga. For a start, why is it that most Amiga hardware development is going on in Germany? Both MacroSystems and Phase 5 are developing next generation machines based around faster processors. And in fact, the most popular range of accelerator cards also comes from Germany. If you add this to the software output of companies like Maxon and ProDad, you'll soon discover that German companies have quite a large slice of the Amiga market.

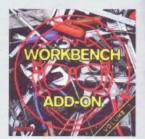
So, why is this? Is it a good thing or a bad thing? And why are so many German companies still developing for the Amiga? In the next issue of Amiga Format we'll be presenting you with the detailed facts and background on a host of German companies and assessing their impact on the future of your computer. Also, Got mit uns, we'll be bringing you reviews of some of the latest German software and hardware, like Haage & Partner's Storm C compiler, and the rather fast Cyberstorm II. Be there, or be in the dark...

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The CD covers all areas of interest, all, the programmer, the user, the creative and the gamer will find what they are looking for. On this CD-ROM there are many shareware programs, some of them at a special price, if you get registered. There is e.g. Shapashifter for 40-DM (instead of 50-DM), in addition to this there is a 50 MB cooperation, as that you can start playing around with Mac applications right away. Then there is PowerPlayer for 20-DM (instead of 30-DM), there are, of course, loads of modules with it, so that you can try it right away. Amilwin, the new XT1-server for the Amiga is available for \$50.0, not seed a \$50.0 Var can a use more than 100-DM with this CD. Therefore you only have to send in the appropriate page in the booklet to the author of the program. \$24.95



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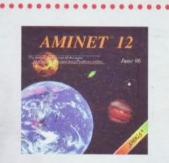
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Aminet 13

Aminet CD 13, dated August 1996, consists of approximately 1,1 gigabytes of software in 2400 archives. Since the release of Aminet CD 12 more than 800 MB new software has appeared. The current edition has a special focus on animations, several hundred animations from the internet were included. User friendly occase software makes the Aminet CD 13 a pleasure to use. £14.95



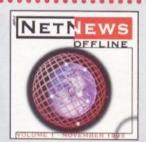
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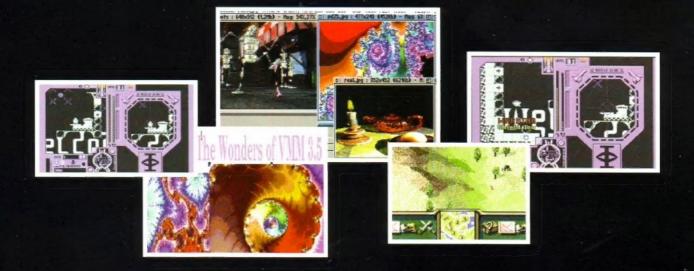
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